

SAMPLE DESCRIPTION

US EPA RECORDS CENTER REGION 5



556334

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 51

SAMPLING DATE 9-25-90 SAMPLING TIME 1630

ORGANIC TRAFFIC NUMBER EHQ 42

INORGANIC TRAFFIC NUMBER MEHA 35

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VDA	13 26 76	W0201013
120 ml	VDA	77	↓
8oz	EXT	78	0157043
8oz	MET	79	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SANDY MED. BROWN TOPSOIL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TOD# MANSFIELD PRODUCTS CO. FOUNDRY

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 52

SAMPLING DATE 9-25-90 SAMPLING TIME 1230

ORGANIC TRAFFIC NUMBER E HQ 43

INORGANIC TRAFFIC NUMBER ME HA 36

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132680	W0201013
120 ml	VOA	81	↓
802	EXT	82	0157043
802	MET	83	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SILTY SAND + GRAVEL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TDO# MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION S 3

SAMPLING DATE 9-25-90 SAMPLING TIME 1400

ORGANIC TRAFFIC NUMBER E HQ 44

INORGANIC TRAFFIC NUMBER ME HA 36

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA		W0201013
120 ml	VOA		↓
80z	EXT		0157043
80z	MET		↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 54

SAMPLING DATE 9-25-90 SAMPLING TIME 1445

ORGANIC TRAFFIC NUMBER EHQ 42

INORGANIC TRAFFIC NUMBER MEHA35

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132688	W0201013
120 ml	VOA	89	↓
80z	EXT	90	0157043
80z	MET	91	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: BROWN MUD

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY N/A

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 55

SAMPLING DATE 9-25-90 SAMPLING TIME 1520

ORGANIC TRAFFIC NUMBER E HQ46

INORGANIC TRAFFIC NUMBER ME HA 39

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132692	W0201013
120 ml	VOA	93	↓
80z	EXT	94	0157043
80z	MET	95	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SAND

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY N/A

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 56

SAMPLING DATE 9-25-90 SAMPLING TIME 1230

ORGANIC TRAFFIC NUMBER E HQ 47

INORGANIC TRAFFIC NUMBER ME 14A 40

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132696	W0201013
120 ml	VOA	97	↓
8oz	EXT	98	0157043
8oz	MET	99	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 57

SAMPLING DATE 9-25-90 SAMPLING TIME 1300

ORGANIC TRAFFIC NUMBER E HQ48

INORGANIC TRAFFIC NUMBER ME HA 41

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132700	W0201013
120 ml	VOA	01	↓
80z	EXT	02	0157043
80z	MET	03	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: DRY ORGANIC RICH
CHOCCLATE COLORED TOPSOIL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

N/A

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 58

SAMPLING DATE 9-25-90 SAMPLING TIME 1330

ORGANIC TRAFFIC NUMBER E HQ 49

INORGANIC TRAFFIC NUMBER ME HA 42

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132 704	W0201013
120 ml	VOA	05	↓
80z	EXT	06	0157043
80z	MET	07	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: VERY DARK, BROWN
TO BLACK SOIL, WITH SOME SAND + GRAVEL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY N/A

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 59

SAMPLING DATE 9-25-90 SAMPLING TIME 1330

ORGANIC TRAFFIC NUMBER E HQ 50

INORGANIC TRAFFIC NUMBER ME HA 43

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132 708	W0201013
120 ml	VOA	09	↓
802	EXT	10	0157043
802	MET	11	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SANDY DARK BROWN TO BLACK SOIL WITH SOME SILT + GRAVEL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY N/A

TEMPERATURE

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME		NO. OF CONTAINERS		REMARKS	
FOH0532		F05-9001-017 CASE: 14960				COOLER # 169	
SAMPLERS: (Signature) <i>Ed Kanecki</i>							
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	TAG NUMBERS	LOW CONCENTRATION MATRIX
EHQ 42	9-25-90	1630		X	S1	132676-78	SOIL
EHQ 43	9-25-90	1230		X	S2	132680-82	SOIL
EHQ 44	9-25-90	1400		X	S3	132684-86	SOIL
EHQ 45	9-25-90	1445		X	S4	132688-90	SOIL
EHQ 46	9-25-90	1520		X	S5	132692-94	SOIL
EHQ 47	9-25-90	1230		X	S6	132696-98	SOIL
EHQ 48	9-25-90	1300		X	S7	132700-02	SOIL
EHQ 49	9-25-90	1330		X	S8	132704-06	SOIL
EHQ 50	9-25-90	1330		X	S9	132708-10	SOIL
						LOT #: 120ml: 60201013	
						802: 0157093	
						(OTR IN COOLER # 169)	
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Received by: (Signature)	
<i>Ed Kanecki</i>		9-25-90 1830					
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Received by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)		Remarks	
						SHIPPED FEDEX TO ENCOT AIRBILL # 9157647284 CUSTODY SEALS: 129244, 129245	

SHIPMENT IS COMPLETE

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME		NO. OF CONTAINERS		REMARKS	
SAMPLERS: (Signature)							
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	TAG NUMBERS	LOW CONCENTRATION MATRIX
MEHA 35	9-25-90	1630	X		S1	132679	SOIL
MEHA 36	9-25-90	1230	X		S2	132683	SOIL
MEHA 37	9-25-90	1400	X		S3	132687	SOIL
MEHA 38	9-25-90	1445	X		S4	132691	SOIL
MEHA 39	9-25-90	1520	X		S5	132695	SOIL
MEHA 40	9-25-90	1230	X		S6	132699	SOIL
MEHA 41	9-25-90	1300	X		S7	132703	SOIL
MEHA 42	9-25-90	1330	X		S8	132707	SOIL
MEHA 43	9-25-90	1330	X		S9	132711	SOIL
						LOT #: 802: 0157043	
						1TR IN COOLER # 168	
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Received by: (Signature)	
Ed Karuch		9-25-90 1830					
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Received by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)		Remarks	
						SHIPPED FED EX TO SKINNER AIRBILL # 9157647295 CUSTODY SEALS: 128885, 128886	

Organic Traffic Report

(For CLP Use Only)

Case Number	SAS No. (if applicable)
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14960

N/A

1. Type of Activity (Check one) <input type="checkbox"/> ENF <input type="checkbox"/> NPLD <input type="checkbox"/> RA <input checked="" type="checkbox"/> SI <input type="checkbox"/> STSI <input type="checkbox"/> ER <input type="checkbox"/> O&M <input type="checkbox"/> RD <input type="checkbox"/> ST <input type="checkbox"/> Other (Specify) <input type="checkbox"/> ESI <input type="checkbox"/> PA <input type="checkbox"/> RIFS <input type="checkbox"/> STPA		2. Region Number <u>V</u> Sampling Co. <u>FIT</u>		4. Date Shipped <u>9-25-90</u> Carrier <u>F</u>		5. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinstate 5. Soil/Sediment 6. Oil (SAS) 7. Waste (SAS) 8. Other (SAS) (Specify)	
Non-Superfund Program		3. Ship To: <u>SCOTT DEVORE</u> <u>ENV. CONTROL TECH</u> <u>3985 RESEARCH PARK DR.</u> <u>ANN ARBOR, MI 48108</u>		Airbill Number <u>9157647284</u> Triple volume required for matrix spike/duplicate aqueous sample. Ship medium and high concentration samples in paint cans. See reverse for additional instructions.		IF VOA SAMPLE PRESERVED INDICATE IN COLUMN C WITH Y OR N.	
Site Name <u>MANFIELD PRODUCTS CO.</u>		City, State <u>MANFIELD, OH</u>		Site Spill ID <u>N/A</u>			

[illegible]

PIT SAMPLE PROPOSAL FORM REGION V

DATE FORM COMPLETED 8/13/90 PAN# FOH05325A TOD# FO5-9001-017 EPA I.D.# 2HD000723601
 SITE NAME (PRINT) Marysville Park CITY Marysville STATE OR

TEAM LEADER Larry Luck SAMPLER E. KARECKI DATE SENT TO NSCC NA INORGANIC NA

CASE # 14960 DRINKING WATER BAB # ORGANIC NA

ROUTINE ANALYTICAL SERVICES (RAB)

LOW WATERS MONITORING WELLS

FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE- TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
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VOA							
ABNs							
PEST/PCB							
METALS							
CN							

FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE- TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
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VOA							
ABNs							
PEST/PCB							
METALS							
CN							

FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE- TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
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VOA							
ABNs							
PEST/PCB							
METALS							
CN							

FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE- TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
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VOA							
ABNs							
PEST/PCB							
METALS							
CN							

FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE- TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
----------	---	-------------------------	-----------------	---------------------------	---------------------------	------------------	---------------------

VOA							
ABNs							
PEST/PCB							
METALS							
CN							

SEE NEXT PAGE FOR SPECIAL ANALYTICAL SERVICE REQUEST FOR THIS SITE

SAB #

Completed

SAMPLER CHECKLIST
ALL LOW CONCENTRATION SAMPLES

Site Name MANSFIELD PRODUCTS

All the below procedures have been followed and all coolers properly packaged for shipment.

[Signature]

Sampler Signature

[Signature]

Team Leader Signature

- ✓ 1. Is date shipped filled in on the OTR/ITR?
- ✓ 2. Is date and time of sample collection (Letter "F") filled in on the OTR/ITR?
- ✓ 3. Has either Shipment Complete or Shipment Not Complete been marked on the OTR/ITR?
- ✓ 4. On the C.O.C. form, is PAN in project no.; TDD/Case/SAS (if applicable) in project name for CLP and site name/case for CRL?
- ✓ 5. Are all dates and times on the C.O.C. form?
- ✓ 6. Has either grab or composite sample been marked on the C.O.C.?
- ✓ 7. Is the matrix filled out on each line of the C.O.C. form? (i.e., Soil, Water, Drinking Water) DO NOT USE ARROWS.
- ✓ 8. Is the Cooler # written on top of the C.O.C. form?
- ✓ 9. Is it referenced on the C.O.C.s which cooler # the OTR/ITR or the CRL tracking forms are in?
- ✓ 10. Are relinquish date, time, and signature on the bottom of the C.O.C.?
- ✓ 11. Is there one C.O.C. per cooler?
- ✓ 12. Has the proper paperwork been put in a plastic bag and taped to the inside of the cooler lid?
 - o C.O.C. - Send white copy, bring back pink and yellow.
 - o OTR/ITR - Send white and yellow copies and bring back blue/green and pink.
 - o CRL tracking forms - send all of them.

- ☒ 13. Is sample number, date, and time of collection permanently labeled on each sample bottle?
- ☒ 14. Are samples packaged in such a way to prevent breakage?
- ☒ 15. Have photographs been taken of each cooler showing ice, custody seals, and paperwork?
- ☒ 16. Are the coolers acceptable at Fed Ex?
- o Condition
 - o Drain plug taped
 - o Correctly labeled with address stickers
- ☒ 17. Are you sending the coolers to the correct lab? Are you using the correct lab acronym?
- ☐ 18. Did you call the SMC before 10:00 a.m. on the day after the sample shipment?

ONLY APPLIES TO WATERS

- _____ 1. On the OTR/ITR forms, is the Sample Blank marked rinsate (4) in sample description (Letter "A").
- _____ 2. For monitoring wells, has it been stated on the bottom of the inorganic C.O.C. whether the metals were filtered or not?
- _____ 3. On the OTR/ITR forms, "blank" should be written under special handling (Letter "D") and on OTR, MSD should be marked in the same location.
- _____ 4. Have the preservatives been written on the C.O.C. next to the bottle volume?
HNO₃ for Metals K₂Cr₂O₇, +HNO₃ for Hg
NaOH for CN HCL for VOA
- _____ 5. Are sample water levels marked with a grease pencil on all sample bottles except for VOA?

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION-LOCATION 51

SAMPLING DATE 9-25-90 SAMPLING TIME 1630

ORGANIC TRAFFIC NUMBER EHQ 42

INORGANIC TRAFFIC NUMBER ME HA 35

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VDA	13 26 76	W0201013
120 ml	VDA	77	↓
8oz	EXT	78	0157043
8oz	MET	79	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SANDY MED. BROWN TOPSOIL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 52

SAMPLING DATE 9-25-90 SAMPLING TIME 1230

ORGANIC TRAFFIC NUMBER E HQ 43

INORGANIC TRAFFIC NUMBER ME HA 36

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132680	W0201013
120 ml	VOA	81	↓
802	EXT	82	0157043
802	MET	83	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SILTY SAND + GRAVEL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 53

SAMPLING DATE 9-25-90 SAMPLING TIME 1400

ORGANIC TRAFFIC NUMBER E HQ 44

INORGANIC TRAFFIC NUMBER ME HA 36

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA		W0201013
120 ml	VOA		↓
8oz	EXT		0157043
8oz	MET		↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOD# MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 54

SAMPLING DATE 9-25-90

SAMPLING TIME 1445

ORGANIC TRAFFIC NUMBER

EHQ 42

INORGANIC TRAFFIC NUMBER

MEHA35

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132688	W0201013
120 ml	VOA	89	↓
8oz	EXT	90	0157043
8oz	NET	91	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: BROWN MUD

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

N/A

SAMPLE DESCRIPTION

SITE NAME/TOOL MANSFIELD PRODUCTS CO.
CASE NUMBER 14960

SAMPLE #/STATION LOCATION 55

SAMPLING DATE 9-25-90 SAMPLING TIME 1520

ORGANIC TRAFFIC NUMBER E HQ46
INORGANIC TRAFFIC NUMBER ME HA 39

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132692	W0201013
120 ml	VOA	93	↓
8oz	EXT	94	0157043
8oz	MET	95	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SAND

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS
pH
CONDUCTIVITY
TEMPERATURE

N/A

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.
CASE NUMBER 14960

SAMPLE #/STATION LOCATION 56

SAMPLING DATE 9-25-90 SAMPLING TIME 1230

ORGANIC TRAFFIC NUMBER E HQ 47
INORGANIC TRAFFIC NUMBER ME HA 40

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132696	W0201013
120 ml	VOA	97	↓
8oz	EXT	98	0157043
8oz	NET	99	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TDMA MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 57

SAMPLING DATE 9-25-90 SAMPLING TIME 1300

ORGANIC TRAFFIC NUMBER E H648

INORGANIC TRAFFIC NUMBER ME HA 41

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132700	W0201013
120 ml	VOA	01	↓
8oz	EXT	02	0157043
8oz	MET	03	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: DRY ORGANIC RICH
CHOCCLATE COLORED TOPSOIL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

N/A

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 58

SAMPLING DATE 9-25-90 SAMPLING TIME 1330

ORGANIC TRAFFIC NUMBER E HQ 49

INORGANIC TRAFFIC NUMBER ME HA 42

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132 704	W0201013
120 ml	VOA	05	↓
8oz	EXT	06	0157043
8oz	MET	07	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: VERY DARK, BROWN
TO BLACK SOIL, WITH SOME SAND + GRAVEL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY N/A

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TODAY MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 59

SAMPLING DATE 9-25-90 SAMPLING TIME 1330

ORGANIC TRAFFIC NUMBER E HQ 50

INORGANIC TRAFFIC NUMBER MEHA 43

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132 708	W0201013
120 ml	VOA	09	↓
80z	EXT	10	0157043
80z	MET	11	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SANDY DARK BROWN TO BLACK SOIL WITH SOME SILT + GRAVEL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION S1

SAMPLING DATE 9-25-90 SAMPLING TIME 1630

ORGANIC TRAFFIC NUMBER E HQ 42

INORGANIC TRAFFIC NUMBER ME HA 35

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VDA	13 26 76	W0201013
120 ml	VDA	77	↓
8oz	EXT	78	0157013
8oz	MET	79	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TODD# HANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 52

SAMPLING DATE 9-25-90 SAMPLING TIME 1230

ORGANIC TRAFFIC NUMBER E HQ 43

INORGANIC TRAFFIC NUMBER ME HA 36

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132680	W0201013
120 ml	VOA	81	↓
802	EXT	82	0157043
802	MET	83	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TOOL MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION S 3

SAMPLING DATE 9-25-90 SAMPLING TIME 1400

ORGANIC TRAFFIC NUMBER E HQ 44

INORGANIC TRAFFIC NUMBER ME HA 36

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA		W0201013
120 ml	VOA		↓
8 oz	EXT		0157043
8 oz	MET		↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH _____

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOD# MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 54

SAMPLING DATE 9-25-90 SAMPLING TIME 1445

ORGANIC TRAFFIC NUMBER EHQ 42

INORGANIC TRAFFIC NUMBER MEHA35

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132688	W0201013
120 ml	VOA	89	↓
80z	EXT	90	0157043
80z	NET	91	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH _____

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 55

SAMPLING DATE 9-25-90 SAMPLING TIME 1520

ORGANIC TRAFFIC NUMBER E HQ46

INORGANIC TRAFFIC NUMBER ME HA 39

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132692	W0201013
120 ml	VOA	93	↓
8oz	EXT	94	0157043
8oz	NET	95	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 56

SAMPLING DATE 9-25-90 SAMPLING TIME 1230

ORGANIC TRAFFIC NUMBER E HQ 47

INORGANIC TRAFFIC NUMBER ME HA 40

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132696	W0201013
120 ml	VOA	97	↓
8oz	EXT	98	0157043
8oz	MET	99	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 57

SAMPLING DATE 9-25-90 SAMPLING TIME 1300

ORGANIC TRAFFIC NUMBER E H648

INORGANIC TRAFFIC NUMBER ME HA 41

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132700	W0201013
120 ml	VOA	01	↓
8oz	EXT	02	0157043
8oz	MET	03	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 58

SAMPLING DATE 9-25-90

SAMPLING TIME 1330

ORGANIC TRAFFIC NUMBER

E HQ 49

INORGANIC TRAFFIC NUMBER

ME HA 42

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132 704	W0201013
120 ml	VOA	05	↓
80z	EXT	06	0157043
80z	MET	07	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

N/A

SAMPLE DESCRIPTION

SITE NAME/TOOL MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 59

SAMPLING DATE 9-25-90 SAMPLING TIME 1330

ORGANIC TRAFFIC NUMBER E HQ 50

INORGANIC TRAFFIC NUMBER MEHA 43

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132 708	W0201013
120 ml	VOA	09	↓
8oz	EXT	10	0157043
8oz	NET	11	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE _____

2nd memo

Mansfield Products / Karecki
14960

① Organic lab received 2 Soil
Inorganic Volumes - MEHA 39
and MEHA 41. I informed
Crl/Jinda K. to ^{see the lab to} analyze ~~BOTH~~ as
are organics.

② Organic lab requested a
copy of the OTR because they
couldn't read their copy.

— Cross out "dissolved" on metals
columns on ITR.

— Need Your Checklist and Sample
description forms - also
Receipt for Samples.

— Press harder on paperwork!

Thanks,
A Davis



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Federal Building, Fort Snelling
Twin Cities, Minnesota 55111

IN REPLY REFER TO:

ES-PER

AUG 21 1975

AIRMAIL

Mr. Ned E. Williams, P.E.
Ohio EPA
450 E. Town Street
P.O. Box 1049
Columbus, Ohio 43216

RE: White-Westinghouse Corp.
246 E. Fourth Street
Mansfield, Ohio
OEPA Permit No. C 203 *AD
Public Notice No. 75-07-015

Attention: Mr. Bill Rupert

Dear Mr. Williams:

513-385-7396

The U.S. Fish and Wildlife Service has reviewed the referenced public notice and associated material describing the discharge and the conditions under which you propose to issue the applicant a discharge permit. Our comments are submitted under the authority of and in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and are consistent with the intent of the National Environmental Policy Act of 1969.

The applicant is a manufacturer of ranges, clothes washers, and clothes dryers and has 17 existing discharge points into Rocky Fork Creek, a tributary of the Mohican River, at Mansfield, Ohio.

On August 11, 1975, Bruce Crawford of our Ohio Area Office accompanied Mr. Bill Rupert of the Northwest District Office of the Ohio Environmental Protection Agency on an onsite inspection of the White-Westinghouse Corporation grounds and discharge points. Onsite inspection revealed that significant quantities of wastewater containing high chromium concentrations were discharging in violation of the proposed permit in the vicinity of outfall 017. In addition significant amounts of emulsified oil and grease were being discharged from a storm drain not covered by the permit in the vicinity of outfall 017. There were also significant amounts of visible foam being expelled from outfall 001. According to Mr. James Crawford, Powerhouse Supervisor for the White-Westinghouse Corporation, the above noted deficiencies would be corrected.

614-469-7452

Rocky Fork Creek flows through the city of Mansfield and easterly for 12 miles before entering the Black Fork of the Mohican River at T22N, R17W, S11. Ohio Division of Wildlife records show that

RECEIVED

AUG 25 1975

Ohio Environmental Protection Agency

OFFICE OF THE DIRECTOR
OHIO EPA

75 AUG 25 AM 10 30

RECEIVED



the Rocky Fork Creek fish fauna have been adversely affected by the various pollutants in the Mansfield area for over 26 years. No fish were found in Rocky Fork Creek during the 1949 and 1972 field surveys. The Ohio Division of Wildlife has numerous pollution reports for Rocky Fork Creek concerning previous activities of the White-Westinghouse Corporation. The present water quality of the stream is, therefore, unable to support a fish population. The lack of fish is a result of poor water quality, as other necessities for aquatic life are present. Fish samples taken near the mouth of Rocky Fork Creek on the Black Fork of the Mohican River show populations of largemouth bass, white crappie, bluegill, bluntnose minnows, hogsuckers, and grass pickerel. Improvement in water quality would probably result in the movement of these species into Rocky Fork Creek and would improve the fishery and aesthetic value.

The U.S. Fish and Wildlife Service is concerned that the parameters listed in the proposed permit for chromium, copper and zinc are too lenient and will not accomplish the desired improvement in the quality of the Nation's waters as outlined in the 1972 Federal Water Pollution Control Act as amended. According to the Criteria for Water Quality (U.S. EPA 1973), the maximum acceptable total chromium concentration in receiving water is 0.05 mg/l. Maximum acceptable concentration of copper in receiving water is 0.1 of the 96-hour LC_{50} . Safe to lethal levels of copper vary from 0.1 to 0.2 mg/l depending upon water chemistry. The maximum acceptable zinc concentration in water is 0.005 of the 96-hour LC_{50} value. Zinc has been shown to cause an 83 percent reduction in fecundity of fathead minnows at 0.18 mg/l in hard water (Brungs, 1969). All of the above metals will be discharged through outfalls 001 and 002. Chromium, zinc and copper synergize easily to form other more toxic solutions when subjected to the right conditions. Since little data has been generated concerning low flow conditions in Rocky Fork Creek, we believe that the parameters should ultimately be limited by bioassay.

RECOMMENDATIONS

It is recommended that a permit not be issued for the proposed discharge unless the permit is conditioned as follows:

That the applicant be required to perform bioassays within 2 years after permit issuance, using the receiving water and the most sensitive aquatic fish and/or invertebrate species.

INTER-OFFICE COMMUNICATION

BILL

TO: Bill Everett, NPDES Permits Section DATE: September 8, 1975
FROM: Andrew Turner, Chief, Industrial Wastewater
SUBJECT: U.S. Fish and Wildlife Comments on White-Westinghouse Corp.
(C203*AD) Public Notice

Since the recommendations by U.S. Fish and Wildlife in their letter of 8/21/75 on the subject permit could have significant impact on the industrial NPDES permit program in Ohio, please hold the Agency's response and any changes in the above permit pending my review of the situation and Bill Rupert's proposed response.

AT:rb

cc: Tom Birch
Bob Phelps
✓ Bill Rupert

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SEP 10 1975

The term free cyanides refers to both the HCN and CN^- forms of cyanide⁸. Total cyanides refers to both dissociable and non-dissociable forms of cyanide. The dissociation constants of the alkali-metal cyanide complexes vary widely. The amount of break-down of these complexes to free cyanides is also influenced by the chemical and physical conditions of the aqueous medium. The simple, inorganic cyanides and the complexes of zinc, cadmium, and lead dissociate readily. Cobalt-cyanide complexes exhibit no dissociation. The ferro and ferricyanide complexes are subject to photodegradation. Without a light source the iron-cyanide complexes will dissociate little. This photodecomposition is dependent on several physical conditions, such as water clarity, mixing, depth, and light availability⁹.

In the aquatic environment, it is hydrocyanic acid and not the cyanide ion, nor the various cyanide complexes, which are toxic. The cyanide anion, because of its electrical charge, cannot permeate the cell membranes as can the more electrically neutral hydrocyanic acid. Cyanide exerts its toxic effects by poisoning the cellular metabolic cycle. It does this by forming a reversible complex with the ferric iron atoms in the iron porphyrin complexes of the cytochrome chain. This results in blocking the pathway for transfer of hydrogen atoms to oxygen, which causes cellular asphyxia¹⁰.

Cyanide, if it does not cause immediate death, can be eliminated from an organism by several metabolic processes. Cyanide does not remain as a residue within an organism and is therefore not a cumulative poison. The primary mechanism of cyanide removal is conversion of free cyanide to thiocyanate (SCN^-) in the liver by the enzyme rhodanase. Thiocyanate is then excreted from the body via the urine. Methemoglobin can also assist in cyanide elimination. Hemoglobin, which has a divalent iron atom, normally contains a small fraction of methemoglobin which contains a trivalent iron atom. Cyanide will combine easily with this trivalent iron, but not with the divalent iron of normal hemoglobin. Methemoglobin forms a harmless and irreversible complex with free cyanide. This can help to rid an organism of the highly toxic hydrocyanic acid¹¹.

Older toxicity studies on aquatic organisms have looked mostly at the acute effects of cyanide. The techniques used have not been consistent between researchers. However, two recent chronic bioassays have been reported, one for the Fathead Minnow (Pimephales promelas), and one for the rainbow trout (Salmo gairdneri).

According to the McKee & Wolf (1963)¹² aquatic invertebrates are more resistant to cyanides than are vertebrates. They cited studies where the midge, Cricoptopus bicinctus survived cyanide concentrations up to 320 ug/l. Daphnia had a 48-hr. toxicity level of 340 ug/l. Thus, the toxicity of cyanides to fish should be the primary consideration in determining a safe level of the substance.

FORM
2C
NPDES

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
001	40	45	47	82	30	12	ROCKY FORK CREEK
002	40	45	47	82	30	12	ROCKY FORK CREEK
003	40	45	47	82	30	13	ROCKY FORK CREEK
004	40	45	47	82	30	13	ROCKY FORK CREEK
005	40	45	47	82	30	13	ROCKY FORK CREEK
006	40	45	47	82	30	14	ROCKY FORK CREEK

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
001	INDUSTRIAL WASTE TREATMENT	360,000	INDUSTRIAL WASTE	1-0 2-K
	PLANT OUTFALL	GD	TREATMENT PLANT	1-G 2-L
002	First Avenue Outfall from Main Plant Bldgs. C,D,E,F,G, H, I, J, K, L	900,000 GD (650,000 GD) (Storm Water)	Non-Contact Cooling Water from Hydraulic Heat Exchangers, Air Compressors, Welders & Air Conditioners. Roof Drains	None
003	N-Bldg. East Storm Sewer	30,000 GD (37,500 GD Storm water)	Non-Contact Cooling Water from Hydraulic Heat Exchangers, & Welders. Roof Drains	None
004	N-Bldg. North Water Recovery Drain	-	Overflow drain for water recovery system. Non-contact cooling water	None
005	N-Bldg. West Storm Sewer	24,000 GD (37,500 GD Storm)	Non-Contact Cooling Water. N-10 Plastic Molding Machines and Blowdown from Cooling Tower. Roof Drains.	XX
006	Drain for incinerator N-Bldg.	-	The unit is not in use, and does not have an EPA Air Permit to operate.	None

OFFICIAL USE ONLY (effluent guidelines sub-categories)

Please print or type in the unshaded areas only.

FORM
2C
NPDES

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
007	40	45	47	82	30	14	ROCKY FORK CREEK
008	40	45	47	82	30	14	ROCKY FORK CREEK
009	40	45	47	82	30	14	ROCKY FORK CREEK
010	40	45	47	82	30	14	ROCKY FORK CREEK
011	40	45	47	82	30	13	ROCKY FORK CREEK
012	40	45	47	82	30	13	

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
007	OUTFALL X-BLDG. #3	-	ROOF DRAINS (NO FLOOR	NONE
		(52,000 GD	DRAINS)	
		STORM WATER)		
008	OUTFALL X-BLDG. #2	NONE	FLOOR DRAINS HAVE BEEN RE-	NONE
			ROUTED TO INDUSTRIAL WASTE	
			SEWER. THIS SEWER NOT USED.	
009	OUTFALL X-BLDG. #1	-	ROOF DRAINS	NONE
		(30,000 GD		
		STORM WATER)		
010	OUTFALL Y-BLDG.	-	OVERFLOW DRAIN FOR WATER	NONE
	SOUTH WATER RECOVERY DRAIN		RECOVERY SYSTEM. NON-CONTACT	
			COOLING WATER.	
011	OUTFALL Y-BLDG. #1	40,000	NON-CONTACT COOLING WATER	NONE
		GD	FROM WELDERS.	
012	OUTFALL Y-BLDG. #2	-	OVERFLOW DRAIN-CONDENSATE	NONE
		(22,500 GD	RETURN PUMPS TO POWER HOUSE.	
		STORM WATER)	ROOF DRAINS.	

OFFICIAL USE ONLY (effluent guidelines sub-categories)

1. Company MAUSEFIELD PRODUCTS
2. Coal Supplier CONSOLIDATED COAL
3. Source Type COAL
5. Permit No. 03 70 01 0182 3004
6. Signed By RALPH STRONG, LAB.
7. Submittal Dates: Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec
8. Data for "as burned" coal: (TO BE INCLUDED IN NEXT PERMIT)

10/7/86

Month	Tons of Coal Received/Burned	Avg. % Ash	Avg. % Sulfur	Avg. % Fines*	Avg. Heat BTU/lb.	Avg. SO_2 lbs/ SO_2 /mm
January	2021 / 2325	10.16	2.34	-	13,299	
February	1764 / 1704	6.62	1.45	3.86	13,687	
March	1498 / 1382	6.51	1.28	4.45	13,827	
April	456 / 415	6.84	1.39	7.79	13,658	
May	704 / 402	6.75	1.31	6.25	13,662	
June	457 / 405	7.19	1.44	7.39	13,695	
July	0 / 182	6.97	1.38	4.39	13,679	
August	0 / 319	6.07	1.38	4.39	13,679	
September	0 / 525	6.97	1.38	4.39	13,679	
October	/					
November	/					
December	/					
Specified Permit Limits:						
				Assure Compliance	> 20%	< 12,000 BTU/lb.

9. Calculation ($\#SO_2/mmBTU$):

10. Comments/Additional Info.

11. Test Methods

* if required in the permit's ST & C

A. A.S.T.M.-02234 (Sample Collection)
 B. A.S.T.M.-03174 (Ash Content)
 C. A.S.T.M.-03177 (Total Sulfur)
 D. A.S.T.M.-02015 (Gross Calorific Value)

Send To: Ohio EPA, Northwest District Office
 1035 Deviac Grove Drive
 Bowling Green, Ohio 43402

F I T S A M P L E P R O P O S A L F O R M R E G I O N V

DATE FORM COMPLETED 8/13/90 PAN# FOH05325A TDD# FO5-9001-017 EPA I.D.# CHD000723601

SITE NAME (PRINT) Mansfield Products CITY Mansfield STATE Ohio

TEAM LEADER Larry Luck SAMPLER Robert E. Karickhoff DATE SENT TO RSCC

CASE # 14960 DRINKING WATER SAS # ORGANIC NA INORGANIC NA

ROUTINE ANALYTICAL SERVICES (RAS)

LOW WATERS MONITORING WELLS
NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE- TOTAL EXPECTED DATE TO LABORATORY NUMBER OF COOLERS SHIPPED NUMBER OF SAMPLES SHIPPED AIR BILL NUMBERS DATE SHIPPED TO LAB

VOA ABNS PEST/PCB METALS
CN

LOW WATERS SURFACE WATERS
NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE- TOTAL EXPECTED DATE TO LABORATORY NUMBER OF COOLERS SHIPPED NUMBER OF SAMPLES SHIPPED AIR BILL NUMBERS DATE SHIPPED TO LAB

VOA ABNS PEST/PCB METALS
CN

LOW SOILS/SEDIMENTS/SLUDGES
NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE- TOTAL EXPECTED DATE TO LABORATORY NUMBER OF COOLERS SHIPPED NUMBER OF SAMPLES SHIPPED AIR BILL NUMBERS DATE SHIPPED TO LAB

VOA ABNS PEST/PCB METALS
CN

RESIDENTIAL/ MUNICIPAL WELL WATERS (DRINKING WATER SAMPLES)

LOW DETECTION LIMITS/FAST TURN AROUND
NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE- TOTAL EXPECTED DATE TO LABORATORY NUMBER OF COOLERS SHIPPED NUMBER OF SAMPLES SHIPPED AIR BILL NUMBERS DATE SHIPPED TO LAB

VOA ABNS PEST/PCB METALS
CN

1 SEE NEXT PAGE FOR SPECIAL ANALYTICAL SERVICE REQUEST FOR THIS SITE

Completed
Confirmed

DEARBORN CHEMICAL (U.S.)
CHEMED CORPORATION

eastern regional office: 6922 HAMILTON AVENUE • CINCINNATI, OHIO 45231 • TELEPHONE 513/521-7212

October 24, 1977

Mr. Jerry Rich
Ohio Environmental Protection Agency
Northwest Section
1035 Devlak Grove
Bowling Green, Ohio 43402

Re: Product Toxicity Information - White-Westinghouse,
Mansfield, Ohio

Dear Mr. Rich:

As per our telephone conversation of 10-20-77, please be advised that Dearborn Chemical Division of Chemed Corporation is proposing the use of Dearborn 874 to treat 40,000 GPD of once-through cooling water at White Westinghouse in Mansfield, Ohio. The recommended dosage of Dearborn 874 is ~~10~~ ppm fed 3 ppm continuously to accomplish scale and fouling inhibition.

It is our understanding that prior to such use of Dearborn 874, notification of the toxicity of this product must be made to your office. Therefore, please accept the following data on Dearborn 874.

	<u>Bluegill</u>	<u>Trout</u>
LC ₅₀ - 96 hour	not less than	not less than
	600 ppm	700 ppm

I trust that the above information will prove suitable for your purposes. In order to facilitate a prompt initiation of this treatment program, an immediate reply from your office would be appreciated.

Thank you in advance for your assistance in this matter.

Sincerely,

DEARBORN CHEMICAL DIVISION
CHEMED CORPORATION

William F. Harfst

William F. Harfst
Eastern Region Technical Director

WFH:cmb

6624
RECEIVED
OCT 26 1977
Ohio Environmental Protection Agency
NORTHWEST DISTRICT

OK
11-4-77
sent letter
to Mr. Harfst

ChicEPA Inter-Office Communication

TO: Dave Northrop, Environmental Law DATE: 1/9/78
FROM: Mike Zwayer, District Engineer
SUBJECT: Westinghouse Effluent Calculations for Nickel

The average flow from Westinghouse is 0.311 mgd.

Rocky Fork Drainage area: 30 sq. mi.
7 day annual low flow : 1.68 cfs

$$1. \text{ low flow in gpd} = 1.68 \text{ cfs} \times 3600 \frac{\text{sec}}{\text{hr}} \times 24 \frac{\text{hrs}}{\text{day}} \times 7.48 \frac{\text{gal}}{\text{cu.ft.}}$$

$$= 1085736.9 \text{ gpd (gallons/day)}$$

$$= 1.086 \text{ mgd (million gallons/day)}$$

2. Total flow in stream = average flow from Westinghouse + low flow

$$\text{Total Flow} = 0.311 + 1.086 = 1.397 \text{ mgd}$$

3. Westinghouse loading = Westinghouse concentration \times 8.34 lbs/gal \times Westinghouse average flow

- use a proposed concentration of 1.5 mg/l

$$\text{loading} = (1.5) (8.34) (0.311) = 3.89 \text{ lbs/day}$$

4. Assuming there are no nickel concentrations present upstream from Westinghouse, then:

$$\text{stream loading} = \text{Westinghouse loading}$$

5. Stream loading = stream concentration \times 8.34 lbs/gal \times total flow in stream

$$3.89 \text{ lbs/day} = (\text{stream concentration}) (8.34) (1.397)$$

$$\text{stream concentration} = 3.89 / (8.34 \times 1.397) = 0.33 \text{ mg/l}$$

Water Quality Standard for Nickel is 0.4mg/l.

The average flow from Westinghouse was determined by averaging a year's worth of flow data taken from Westinghouse monthly operating reports.

The low flow value was taken from this office's files.

We therefore would recommend changing the final nickel limits to .75 mg/l - avg. and 1.5 mg/l - max.. Water quality standards will be complied with and the limitations will be more in line with BPT. These numbers also are fairly representative of the companys existing effluent quality as noted on the attached graphs, if the abnormally high numbers are not included.

MLZ/kar

MANSFIELD PRODUCTS COMPANY

A DIVISION OF WHITE-WESTINGHOUSE CORPORATION
246 East Fourth Street, Mansfield, Ohio 44902 (419) 755-6011

Handwritten notes:
12/13/77
Gentry
ND
X

January 13, 1978

Technical Records Section
Ohio Environmental Protection Agency
Post Office Box 1049
Columbus, Ohio 43216

Dear Sir:

Attached is the December 1977 Analysis of our Effluents. The exceptions to the Permit are:

<u>OUTFALL</u>	<u>DATE</u>	<u>PARAMETER</u>	<u>REPORTED</u>	<u>LIMITS</u>
001	12-13	FREE CYANIDE MAX	.15	.10 MG/L
001	12-__	FREE CYANIDE AVG	.09	.05 MG/L
001	12- 6	HEX-VAL CHROME MAX	.319	.10 MG/L
001	12-__	HEX-VAL CHROME AVG	.11	.05 MG/L

FREE CYANIDE

The cyanide plan is scheduled to be discussed at the Pre-hearing Conference with Ohio EPA.

HEX-VAL CHROME

The max. limit was exceeded one time, which also caused the average to be high. It is noted that the following two test samples (Dec. 13 and Dec. 20) tested AA. Therefore, the Chrome Tests have been corrected and the treatment is in control.

Very truly yours,

M. Tidmore
M. Tidmore
FACILITIES MANAGER

at
Attachments

PERMITS AND
COMPLIANCE

12/13/77

MANSFIELD PRODUCTS COMPANY

A DIVISION OF WHITE-WESTINGHOUSE CORPORATION
245 East Fourth Street, Mansfield, Ohio 44902 (419) 755-6011

44-37427
VWS
-116

April 10, 1978

Mr. Stanford Stein
Enforcement Division
United States Environmental
Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Ref: Permit No. OH-0004600, Mansfield Products Company,
Mansfield, Ohio

Re: Squire, Sanders & Dempsey's Letter - March 4, 1978

Dear Mr. Stein:

This letter is intended to provide additional support information and sequence of operational events--Outfalls 002, 003, 004, 005, 011 and 012.

Prior to July 1975, a portion of the effluent from the Waste Treatment facility was pumped into the shop water piping system via a water recovery pump at a rate of approximately 160,000 gallons per day. Since the effluent 001 from the Waste Treatment facility contained nickel, suspended solids, etc., these contaminants were pumped into the shop water piping system, and were eventually discharged to Rocky Fork Creek through the storm sewers 002, 003, 004, 005, 011 and 012. Testing of these outfalls indicated that these contaminants were in the storm sewer effluents. Reference "Schematic Water Flow" attached.

During July 1975, the Waste Treatment Water Recovery System was removed from operation and the Waste Treatment effluent was discharged into Rocky Fork Creek. As a result of no longer operating the recovery system, outfalls 002, 003, 004, 005, 011 and 012 discharged only non-contact cooling water from welders, air conditioning units, heat exchangers, roof drains, and floor drains. This is shown schematically in the flow diagrams of outfalls 003, 004, 005, 010, 011 and 012, dated 4/4/77 (Attachments). This water was and is uncontaminated city and well water. Additionally, the data recorded on the flow diagrams shows that the effluents were within the limits of the parameters, and the monitoring reports demonstrate the success of the removal of the recirculated Waste Treatment water from the shop water system that discharges into the storm sewer outfalls 002, 003, 004, 005, 011 and 012.

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APR 19 1978

Ohio Environmental Protection Agency

NORTHWEST DISTRICT

One of the White Consolidated Industries

6000

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APR 14 1978 PAS

Ohio Environmental Protection Agency

Mr. Stanford Stein
U.S. E.P.A.
Region V
Chicago, Illinois

April 10, 1978
Page 2

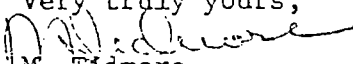
The above information is valid for the four requests for additional information--November 18, 1977 (Attachment).

<u>ITEM</u>	<u>OUTFALL</u>	<u>PARAMETER</u>
# 1	002 and 005	NICKEL, OIL & GREASE
# 2	003 and 004	OIL & GREASE
# 3	011 (NOT 001)	COPPER, NICKEL, SUSPENDED SOLIDS, OIL & GREASE
# 4	003, 004, 005, 011 and 012	Ph

We are assuming Item #3 is referring to outfall 011, not 001. Outfall 001 was not a part of this request.

We would appreciate your evaluation of this additional support data, and your response thereto. We shall, to the extent available, furnish additional data that you may require.

Very truly yours,


M. Tidmore
FACILITIES MANAGER

at
Attachments

✓cc: Mr. Ralph Everett, Ohio E.P.A.
Post Office Box 1049
Columbus, Ohio 43216

cc: Mr. Thomas Hanson
Squire, Sanders & Dempsey
1800 Union Commerce Building
Cleveland, Ohio 44115

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

OHIO EPA

NOTIFICATION OF CASE REFERRAL
TO THE
ATTORNEY GENERAL'S OFFICE

TO: Robert J. Manson, Chief, Northwest District Office
FROM: Mark V. Stanga, Legal Consultant, thru Stephen T. Yost, Asst. Legal Adv.
DATE: April 9, 1979

SUBJECT: White-Westinghouse Corp., Mansfield Products Div.
Case Name
EBR
Type of Case
EBR 79-28
Case Number
Permit/Application/Source Number
Location of Facility

Case File Prepared By:

The Attorney General's Office was requested to represent the Agency in the above-referenced case on this date. Your office may be requested to provide assistance in the preparation of this case.

Hearing Examiner: N/A

Prehearing Date: N/A

Hearing Date: Not yet set by EBR

If you have any questions, please contact me at 614-466-3491.

cc: Dave Northrop
Ernie Rotering
Ernie Neal

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APR 11 1979

Ohio Environmental Protection Agency
NORTHWEST DISTRICT

NPDES COMPLIANCE INSPECTION REPORT (Coding Instructions: See back of last page)																					
TRANSACTION CODE		NPDES										YR	MO	DA	TYPE	REC-TOR	FAC TYPE	TIME			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	a.m.	p.m.
REMARKS																					
0343 * C D																					
21																					
65																					
70																					
SECTION A - Permit Summary																					
NAME AND ADDRESS OF FACILITY (Include County, State and ZIP code)																		EXPIRATION DATE			
Mansfield Products Co.																		7-26-37			
White-Westinghouse Corp.																		ISSUANCE DATE			
246 E. Fourth St. - Mansfield, OH 44802																		7-27-75			
RESPONSIBLE OFFICIAL										TITLE					PHONE						
H. J. Tidmore										Facilities Manager					219-755-5011						
FACILITY REPRESENTATIVE										TITLE					PHONE						
Bill Woods										Supervisor, Plant Engineering					419-735-6011						
SECTION B - Effluent Characteristics (Additional sheets attached _____)																					
PARAMETER/OUTFALL		MINIMUM	AVERAGE	MAXIMUM	ADDITIONAL																
Total Cr	SAMPLE MEASUREMENT			0.05 mg/l	Water Management -- .040 ug/l																
/ 001	PERMIT REQUIREMENT		0.5 mg/l	1.0 mg/l																	
Total Cu	SAMPLE MEASUREMENT			0.05 mg/l	Water Management--below detectable																
/ 001	PERMIT REQUIREMENT		0.5 mg/l	1.0 mg/l																	
Total Pb	SAMPLE MEASUREMENT			0.3 mg/l	Water Management--125 ug/l																
/ 001	PERMIT REQUIREMENT		0.5 mg/l	1.0 mg/l																	
Total Cr Filtrate	SAMPLE MEASUREMENT			0.03 mg/l	Water Management--below detectable																
	PERMIT REQUIREMENT		0.5 mg/l	1.0 mg/l																	
Total Cu Filtrate	SAMPLE MEASUREMENT			0.03 mg/l	Water Management--125 ug/l																
/ Filtrate	PERMIT REQUIREMENT		0.5 mg/l	1.0 mg/l																	
SECTION C - Facility Evaluation (S = Satisfactory, U = Unsatisfactory, N/A = Not applicable)																					
1 EFFLUENT WITHIN PERMIT REQUIREMENTS			1 OPERATION AND MAINTENANCE			1 SAMPLING PROCEDURES															
1 RECORDS AND REPORTS			1 COMPLIANCE SCHEDULE			1 LABORATORY PRACTICES															
1 PERMIT VERIFICATION			1 FLOW MEASUREMENTS			OTHER:															
SECTION D - Comments																					
SECTION E - Inspection/Review						ENFORCEMENT DIVISION USE ONLY															
SIGNATURES			AGENCY		DATE																
INSPECTED BY																					
INSPECTED BY																					
REVIEWED BY							COMPLIANCE STATUS														
							<input type="checkbox"/> COMPLIANCE														
							<input type="checkbox"/> NONCOMPLIANCE														

NPDES COMPLIA				INSPECTION REPORT (Coding Instructions)				Page of last page)					
TRANSACTION CODE		NPDES		YR MO DA		TYPE		DIRECTOR		FAC TYPE		TIME	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	5	1	1	1	1	1	1	1	1	1	1	10:00	2:30

REMARKS													

21														64	
ADDITIONAL															

SECTION A - Permit Summary													
NAME AND ADDRESS OF FACILITY (Include County, State and ZIP code)												EXPIRATION DATE	
Mansfield Products Co. White-Hestinghouse Corp. 246 E. Fourth St. Birmingham, AL 35202												7-26-87	
RESPONSIBLE OFFICIAL												ISSUANCE DATE	
M. W. Tidmore												7-27-76	
FACILITY REPRESENTATIVE												PHONE	
Bill Woods												419-755-6011	
TITLE												PHONE	
Facilities Manager												419-755-6011	
TITLE												PHONE	
Supervisor, Plant Engineering												419-755-6011	

SECTION B - Effluent Characteristics (Additional sheets attached _____)					
PARAMETER/ OUTFALL		MINIMUM	AVERAGE	MAXIMUM	ADDITIONAL
Total /Filtrate	SAMPLE MEASUREMENT			0.3 mg/l	Water Management -- 0.1 mg/l
	PERMIT REQUIREMENT		0.5 mg/l	1.0 mg/l	
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				
	SAMPLE MEASUREMENT				
	PERMIT REQUIREMENT				

SECTION C - Facility Evaluation (S = Satisfactory, U = Unsatisfactory, N/A = Not applicable)			
EFFLUENT WITHIN PERMIT REQUIREMENTS		OPERATION AND MAINTENANCE	
RECORDS AND REPORTS		COMPLIANCE SCHEDULE	
PERMIT VERIFICATION		FLOW MEASUREMENTS	
		OTHER:	

SECTION D - Comments		
SECTION E - Inspection/Review		
SIGNATURES	AGENCY	DATE
INSPECTED BY		
INSPECTED BY		
REVIEWED BY		
		ENFORCEMENT DIVISION USE ONLY
		COMPLIANCE STATUS
		<input type="checkbox"/> COMPLIANCE
		<input type="checkbox"/> NONCOMPLIANCE

CODING INSTRUCTIONS

Column 1 Transaction Code - Use N, C, or D for New, Change or Delete. All inspections will be new unless there is an error in the data keypunched into WENDB.

Column 2 Card Code - Always 5 for this card.

Columns 3-11 NPDES - The NPDES permit number. (The State permit number may be accommodated in the remarks or additional spaces).

Column 12-17 Inspection Date - Entered in the year/month/day format (e.g. 77/06/30= June 30, 1977).

Column 18 Inspection Type - An inspection will fall into one of two possible categories: 'C' for Compliance Evaluation or 'S' for Compliance Sampling.

Column 19 Inspector Code - An inspection may be performed by the Region, State or NEIC (U.S. EPA National Enforcement Investigations Center). It may also be the result of a joint effort. (Credit in FPRS for a joint inspection is given to the lead agency.) Acceptable codes for WENDB are:

- R - EPA Regional inspections
- S - State inspections
- J - Joint EPA and State inspections - EPA lead
- T - Joint EPA and State inspections - State lead
- N - NEIC inspections

Column 20 Facility Type - This code describes the type of facility that was inspected. Acceptable codes are:

- 1 - Municipal - Publicly-Owned Treatment Works (POTWs) with 1972 Standard Industrial Classification (SIC) 4952.
- 2 - Industrial - Other than Municipal, Agricultural, and Federal facilities.
- 3 - Agricultural - Those facilities classified with 1972 SIC 0111-0971.
- 4 - Federal - Those facilities identified as Federal by EPA Regional office.

Columns 21-70 Remarks - This remarks field provides the inspector with a vehicle to store descriptive information about the inspection. There is no set format within this 50-position field. Individual Regions or States may choose to set aside portions of this field for their own specific needs.

Sections F thru L: Complete on all inspections, as appropriate. N/A = Not Applicable

PERMIT NO.
010004800**SECTION F - Facility and Permit Background**ADDRESS OF PERMITTEE IF DIFFERENT FROM FACILITY
(Including City, County and ZIP code)DATE OF LAST PREVIOUS INVESTIGATION BY EPA/STATE
7-12-73**FINDINGS**The entity was found to be in compliance
with its NPDES Permit.**SECTION G - Records and Reports**

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.

☒ YES ☐ NO ☐ N/A (Further explanation attached _____)**DETAILS:****(a) ADEQUATE RECORDS MAINTAINED OF:**

(i) SAMPLING DATE, TIME, EXACT LOCATION	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(ii) ANALYSES DATES, TIMES	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(iii) INDIVIDUAL PERFORMING ANALYSIS	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(iv) ANALYTICAL METHODS/TECHNIQUES USED	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(v) ANALYTICAL RESULTS (e.g., consistent with self-monitoring report data)	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A

(b) MONITORING RECORDS (e.g., flow, pH, D.O., etc.) MAINTAINED FOR A MINIMUM OF THREE YEARS INCLUDING ALL ORIGINAL STRIP CHART RECORDINGS (e.g. continuous monitoring instrumentation, calibration and maintenance records).☐ YES ☐ NO ☐ N/A**(c) LAB EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS KEPT.**☐ YES ☐ NO ☐ N/A**(d) FACILITY OPERATING RECORDS KEPT INCLUDING OPERATING LOGS FOR EACH TREATMENT UNIT.**☐ YES ☐ NO ☐ N/A**(e) QUALITY ASSURANCE RECORDS KEPT.**☐ YES ☐ NO ☐ N/A**(f) RECORDS MAINTAINED OF MAJOR CONTRIBUTING INDUSTRIES (and their compliance status) USING PUBLICLY OWNED TREATMENT WORKS.**☐ YES ☐ NO ☐ N/A**SECTION H - Permit Verification**

INSPECTION OBSERVATIONS VERIFY THE PERMIT.

☒ YES ☐ NO ☐ N/A (Further explanation attached _____)**DETAILS:****(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE.**☐ YES ☐ NO ☐ N/A**(b) FACILITY IS AS DESCRIBED IN PERMIT.**☐ YES ☐ NO ☐ N/A**(c) PRINCIPAL PRODUCT(S) AND PRODUCTION RATES CONFORM WITH THOSE SET FORTH IN PERMIT APPLICATION.**☐ YES ☐ NO ☐ N/A**(d) TREATMENT PROCESSES ARE AS DESCRIBED IN PERMIT APPLICATION.**☐ YES ☐ NO ☐ N/A**(e) NOTIFICATION GIVEN TO EPA/STATE OF NEW, DIFFERENT OR INCREASED DISCHARGES.**☐ YES ☐ NO ☐ N/A**(f) ACCURATE RECORDS OF RAW WATER VOLUME MAINTAINED.**☐ YES ☐ NO ☐ N/A**(g) NUMBER AND LOCATION OF DISCHARGE POINTS ARE AS DESCRIBED IN PERMIT.**☐ YES ☐ NO ☐ N/A**(h) CORRECT NAME AND LOCATION OF RECEIVING WATERS.**☐ YES ☐ NO ☐ N/A**(i) ALL DISCHARGES ARE PERMITTED.**☒ YES ☐ NO ☐ N/A**SECTION I - Operation and Maintenance**

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.

☐ YES ☒ NO ☐ N/A (Further explanation attached _____)**DETAILS:** Batch Chrome Reduction process not analyzed chemically for completeness.**(a) STANDBY POWER OR OTHER EQUIVALENT PROVISIONS PROVIDED.**☐ YES ☒ NO ☐ N/A**(b) ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.**☒ YES ☐ NO ☐ N/A**(c) REPORTS ON/ALTERNATE SOURCE OF POWER SENT TO EPA/STATE AS REQUIRED BY PERMIT.**☐ YES ☐ NO ☐ N/A**(d) SLUDGES AND SOLIDS ADEQUATELY DISPOSED.**☒ YES ☐ NO ☐ N/A**(e) ALL TREATMENT UNITS IN SERVICE.**☒ YES ☐ NO ☐ N/A**(f) CONSULTING ENGINEER RETAINED OR AVAILABLE FOR CONSULTATION ON OPERATION AND MAINTENANCE PROBLEMS.**☐ YES ☐ NO ☐ N/A**(g) QUALIFIED OPERATING STAFF PROVIDED.**☒ YES ☐ NO ☐ N/A**(h) ESTABLISHED PROCEDURES AVAILABLE FOR TRAINING NEW OPERATORS.**☒ YES ☐ NO ☐ N/A**(i) FILES MAINTAINED ON SPARE PARTS INVENTORY, MAJOR EQUIPMENT SPECIFICATIONS, AND PARTS AND EQUIPMENT SUPPLIERS.**☒ YES ☐ NO ☐ N/A**(j) INSTRUCTIONS FILES KEPT FOR OPERATION AND MAINTENANCE OF EACH ITEM OF MAJOR EQUIPMENT.**☒ YES ☐ NO ☐ N/A**(k) OPERATION AND MAINTENANCE MANUAL MAINTAINED.**☐ YES ☐ NO ☐ N/A**(l) SPCC PLAN AVAILABLE.**☐ YES ☐ NO ☐ N/A**(m) REGULATORY AGENCY NOTIFIED OF BY PASSING. (Dates _____)**☐ YES ☐ NO ☐ N/A**(n) ANY BY-PASSING SINCE LAST INSPECTION.**☐ YES ☐ NO ☐ N/A**(o) ANY HYDRAULIC AND/OR ORGANIC OVERLOADS EXPERIENCED.**☐ YES ☒ NO ☐ N/A

PERMIT NO.

040004600

SECTION J - Compliance Schedules

PERMITTEE IS MEETING COMPLIANCE SCHEDULE. ☐ YES ☐ NO ☒ N/A (Further explanation attached _____)

CHECK APPROPRIATE PHASE(S):

- ☐ (a) THE PERMITTEE HAS OBTAINED THE NECESSARY APPROVALS FROM THE APPROPRIATE AUTHORITIES TO BEGIN CONSTRUCTION.
- ☐ (b) PROPER ARRANGEMENT HAS BEEN MADE FOR FINANCING (mortgage commitments, grants, etc.).
- ☐ (c) CONTRACTS FOR ENGINEERING SERVICES HAVE BEEN EXECUTED.
- ☐ (d) DESIGN PLANS AND SPECIFICATIONS HAVE BEEN COMPLETED.
- ☐ (e) CONSTRUCTION HAS COMMENCED.
- ☐ (f) CONSTRUCTION AND/OR EQUIPMENT ACQUISITION IS ON SCHEDULE.
- ☐ (g) CONSTRUCTION HAS BEEN COMPLETED.
- ☐ (h) START-UP HAS COMMENCED.
- ☐ (i) THE PERMITTEE HAS REQUESTED AN EXTENSION OF TIME.

SECTION K - Self-Monitoring Program

Part 1 - Flow measurement (Further explanation attached _____)

PERMITTEE FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT. ☒ YES ☐ NO ☐ N/A
DETAILS:(a) PRIMARY MEASURING DEVICE PROPERLY INSTALLED. ☒ YES ☐ NO ☐ N/ATYPE OF DEVICE: ☐ WEIR ☒ PARSHALL FLUME ☐ MAGMETER ☐ VENTURI METER ☐ OTHER (Specify _____)(b) CALIBRATION FREQUENCY ADEQUATE. (Date of last calibration _____) ☒ YES ☐ NO ☐ N/A(c) PRIMARY FLOW MEASURING DEVICE PROPERLY OPERATED AND MAINTAINED. ☒ YES ☐ NO ☐ N/A(d) SECONDARY INSTRUMENTS (totalizers, recorders, etc.) PROPERLY OPERATED AND MAINTAINED. ☐ YES ☐ NO ☐ N/A(e) FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGES OF FLOW RATES. ☐ YES ☐ NO ☐ N/A

Part 2 - Sampling (Further explanation attached _____)

PERMITTEE SAMPLING MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT. ☐ YES ☒ NO ☐ N/A
DETAILS:(a) LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES. ☒ YES ☐ NO ☐ N/A(b) PARAMETERS AND SAMPLING FREQUENCY AGREE WITH PERMIT. ☒ YES ☐ NO ☐ N/A(c) PERMITTEE IS USING METHOD OF SAMPLE COLLECTION REQUIRED BY PERMIT. ☒ YES ☐ NO ☐ N/A
IF NO, ☐ GRAB ☐ MANUAL COMPOSITE ☐ AUTOMATIC COMPOSITE FREQUENCY _____(d) SAMPLE COLLECTION PROCEDURES ARE ADEQUATE. ☐ YES ☐ NO ☐ N/A(i) SAMPLES REFRIGERATED DURING COMPOSITING ☐ YES ☐ NO ☐ N/A(ii) PROPER PRESERVATION TECHNIQUES USED ☐ YES ☒ NO ☐ N/A(iii) FLOW PROPORTIONED SAMPLES OBTAINED WHERE REQUIRED BY PERMIT ☐ YES ☐ NO ☐ N/A(iv) SAMPLE HOLDING TIMES PRIOR TO ANALYSES IN CONFORMANCE WITH 40 CFR 136.3 ☒ YES ☐ NO ☐ N/A(e) MONITORING AND ANALYSES BEING PERFORMED MORE FREQUENTLY THAN REQUIRED BY PERMIT. ☐ YES ☒ NO ☐ N/A(f) IF (e) IS YES, RESULTS ARE REPORTED IN PERMITTEE'S SELF-MONITORING REPORT. ☐ YES ☐ NO ☐ N/A

Part 3 - Laboratory (Further explanation attached _____)

PERMITTEE LABORATORY PROCEDURES MEET THE REQUIREMENTS AND INTENT OF THE PERMIT. ☐ YES ☐ NO ☐ N/A
DETAILS:(a) EPA APPROVED ANALYTICAL TESTING PROCEDURES USED. (40 CFR 136.3) ☒ YES ☐ NO ☐ N/A(b) IF ALTERNATE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED. ☐ YES ☐ NO ☐ N/A(c) PARAMETERS OTHER THAN THOSE REQUIRED BY THE PERMIT ARE ANALYZED. ☐ YES ☒ NO ☐ N/A(d) SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. ☒ YES ☐ NO ☐ N/A(e) QUALITY CONTROL PROCEDURES USED. ☒ YES ☐ NO ☐ N/A(f) DUPLICATE SAMPLES ARE ANALYZED. _____ % OF TIME. (See Section H) ☒ YES ☐ NO ☐ N/A(g) SPIKED SAMPLES ARE USED. _____ % OF TIME. ☐ YES ☐ NO ☐ N/A(h) COMMERCIAL LABORATORY USED. ☐ YES ☐ NO ☐ N/A(i) COMMERCIAL LABORATORY STATE CERTIFIED. ☐ YES ☐ NO ☐ N/ALAB NAME Water Management, Inc.LAB ADDRESS 2480 Broadway Avenue, Cleveland, OH 44115 216-566-3090

PERMIT NO.
OH0004600

SECTION L - Effluent/Receiving Water Observations (Further explanation attached _____)

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOL	COLOR	OTHER
001	None	None	Slightly cloudy	Moderate	None	Slight green/brown	
002	None	None	Clear	None	None	None	
010	-	-	-	-	-	-	No Flow

(Sections M and N: Complete as appropriate for sampling inspections)

SECTION M - Sampling Inspection Procedures and Observations (Further explanation attached _____)

- ☒ GRAB SAMPLES OBTAINED
☐ COMPOSITE OBTAINED
☐ FLOW PROPORTIONED SAMPLE
☐ AUTOMATIC SAMPLER USED
☐ SAMPLE SPLIT WITH PERMITTEE
☒ CHAIN OF CUSTODY EMPLOYED
☐ SAMPLE OBTAINED FROM FACILITY SAMPLING DEVICE

COMPOSITING FREQUENCY NA PRESERVATION 4000, iceSAMPLE REFRIGERATED DURING COMPOSITING: ☐ YES ☐ NOSAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE Yes

SECTION N - Analytical Results (Attach report if necessary)

Section K, Part 3 (f) Duplicate samples are analyzed once a year with OEPA.

MANSFIELD PRODUCTS COMPANY

A DIVISION OF WHITE-WESTINGHOUSE CORPORATION
246 East Fourth Street Mansfield, Ohio 44902 (419) 755-6011

June 14, 1979

Technical Records
OHIO ENVIRONMENTAL PROTECTION AGENCY
P.O. Box 1049
Columbus, Ohio 43216

Dear Sir:

Attached is the May, 1979 Analysis of our Effluents.

The exception to the Permit:

<u>Date</u>	<u>Outfall</u>	<u>Parameter</u>	<u>Limit</u>	<u>Reported</u>
5-__	001	Nickel - Total Daily Average	500 UG/L	790 UG/L
5-29	001	Nickel - Total Daily Maximum	1000 UG/L	3400 UG/L

Nickel


The reported daily average value exceeded the Permit parameter, because of the one high reported daily maximum value - May 29, 1979. The other four daily maximum values are as follows, and are well within the Permit parameters for Nickel:

June 1, 1979	100 UG/L
June 8, 1979	200 UG/L
June 15, 1979	250 UG/L
June 21, 1979	AA -- Below detectable limits.

A Nickel Sulfate tank in the X-Pickle process was found to be faulty and leaking through the Waste Treatment Plant over the Memorial Holiday weekend. There was control for Saturday with the Waste Treatment operator on the job. There was no operator assigned to work Memorial Day - Monday, May 28, 1979.

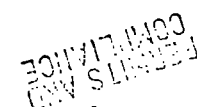
Corrective action (repaired leak) has been taken and the process is under control.

Yours truly,


M. Tidmore
Facilities Manager

Attachments

One of the White Consolidated Industries

cc: Mr. Van Carson, Squire, Sander  Dempsey, Cleveland, Ohio
cc: Mr. J. L. Calhoun, White Consolidated Industries, Inc., Cleveland, Ohio

MANSFIELD PRODUCTS COMPANY

A DIVISION OF WHITE-WESTINGHOUSE CORPORATION
246 East Fourth Street, Mansfield, Ohio 44902 (419) 755-6011

*file NPDES
RICHLAND CO.*

July 13, 1979

Technical Records
OHIO ENVIRONMENTAL PROTECTION AGENCY
P. O. Box 1049
Columbus, Ohio 43216

RECEIVED

JUL 23 1979

Ohio Environmental Protection Agency
NORTHWEST DISTRICT

Dear Sir:

Attached is the June 1979 Analysis of our Effluents.

The exception to the Permit:

<u>Data</u>	<u>Outfall</u>	<u>Parameter</u>	<u>Limit</u>	<u>Reported</u>
6-__	001	Chrome Hex-Val Daily Average	50 UG/L	102.1 UG/L
6-4	001	Chrome Hex-Val Daily Maximum	100 UG/L	148.6 UG/L
6-19	001	Chrome Hex-Val Daily Maximum	100 UG/L	259.8 UG/L

Chrome Hex-Val

Chrome Hex-Val has been in control with no reported excursions for over one year (last excursion, March 1978). During that period the level of production was stable; therefore, the process was in control with experienced hourly personnel running the operation.

A schedule increase over the last two months has required an addition of in excess of 100 hourly employees to be hired. Union contract prescribed bumping procedures must be followed. Consequently, inexperienced help was assigned to the bonderizers (which contain the chromic rinse), and the process went out of control, resulting in the two reported excursions. Additional training will be given to the new employees involved in the bonderizer areas so as to insure the prescribed procedures are followed and the process will be in control.

Yours truly,

M. Tidmore

M. Tidmore
Facilities Manager

Attachments

cc: Mr. Van Carson, Squire, Sanders & Dempsey, Cleveland, Ohio
cc: Mr. J. L. Calhoun, White Consolidated Industries, Inc., Cleveland, Ohio

One of the White Consolidated Industries

WCI

MANSFIELD PRODUCTS COMPANY

A DIVISION OF WHITE-WESTINGHOUSE CORPORATION
246 East Fourth Street, Mansfield, Ohio 44902 (419) 755-6011

September 5, 1979

Mr. J. Brian Gasiorowski
District Engineer
State of Ohio
Environmental Protection Agency
Northwest District Office
1035 Devlac Grove Drive
Bowling Green, Ohio 43402

Reference: Hexavalent Chromium Violations
Your Letter Dated August 6, 1979

Dear Mr. Gasiorowski:

As requested in your letter, the following report is submitted concerning the hex-chrome violations, and steps that have been taken to eliminate possible future problems.

There are four chromic rinse tanks within the facility that contain a total of 3800 gallons of hex-chrome solution. The four tanks are dumped once per week to the chrome storage tank (7300 gallon capacity) via a chromic rinse sewer for treatment.

The hex-chrome is reduced by the pickle acid waste and tests indicate that less than 1000 gallons of acid is required to complete the treatment. Except for the third floor bonderizer chromic rinse system, the systems are self-contained with no carry over or over flow. Therefore, hex-chrome cannot flow into the waste treatment system by any other route than the chromic rinse sewer. There is a spray rinse following the third floor system which is a requirement. A fog-type spray of deionized water is utilized at a rate somewhat less than the evaporation rate from the system. Thus, normally there is little or no carry over or chromic rinse water from the third floor system.

Sequence of events:

1. No excursions for hex-chrome for fifteen (15) months.
2. Was not aware of June excursions until first week in July when the monthly report from the Lab was received.
3. Immediately reviewed facilities and treatment method to determine cause.

RECEIVED

SEP 10 1979

Ohio Environmental Protection Agency
NORTHWEST DISTRICT

One of the White Consolidated Industries

WCI

Ohio EPA

Re: Solid Waste
RCRA Inventory

Mr. Witt Eutzy, President
White Westinghouse Corporation
246 E. 4th Street
Mansfield, OH 44902

July 23, 1981

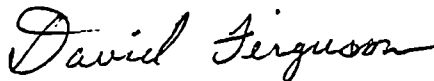
W. T. ID MURE

Dear Mr. Eutzy:

The Office of Land Pollution Control, Northwest District Office of the Ohio Environmental Protection Agency, is presently conducting a survey of industrial waste disposal practices in those counties within our jurisdiction. The results of this survey will be used for the purpose of implementing an inventory of industrial waste disposal sites, as mandated by the Resource Conservation and Recovery Act (RCRA). On site and off site facilities will later be evaluated in accordance with criteria published in Volume 44, No. 179, of the Federal Register.

For our information, please briefly answer the questions on the enclosed form, and return to the address given below as soon as possible. Use additional paper if necessary. Thank you for your cooperation. If you have any questions or comments, please call me at 419-352-8461.

Sincerely,



David L. Ferguson
Environmental Scientist
Office of Land Pollution Control
Northwest District Office

DLF:sd

8/6/81

Company Information

MANSFIELD PRODUCTS COMPANY

1. Company Name:

2. Company Address:

246 E. FOURTH ST.
MANSFIELD, OH 44902

3. County in which company located: Richland

4. Name of person responding to survey: M. Tidmore
Facilities Mgr.

Telephone: (419) 755-656

5. Description of wastes currently produced:

<u>Waste Name</u>	<u>Quantity Generated</u>	<u>Solid, Sludge Liquid, hazardous</u>	<u>On-or off-site disposal</u>	<u>Method (pit, incinerator, landfill)</u>
1. F006	150/Ton/Month	Hazardous Sludge	Off-Site	Landfill
2. D005	5 Ton/Month	Hazardous Sludge	Off-Site	Landfill
3. F006	2000 Gallons/Month	Hazardous Liquid	Off-Site	-
4. D001 (Paint Wastes)	8 Barrels/Month	Hazardous Liquid	Off-Site	Incinerator

6. Off-site: Give handlers name and address, and site of ultimate disposal, for each of the above listed wastes.

1. Browning-Ferris Industries
Mansfield, OHRichland County Landfill
Mansfield, OH

2. Mansfield Products Co.

Richland County Landfill, Mansfield, OH

3. Ny-Trex, Richfield, OH

Chem-Clear, Cleveland, OH

4. Mansfield Products Co.

Robert Ross & Sons, Grafton, OH

7. Closed sites: Give waste descriptions and approximate quantities for any wastes previously disposed in a now closed or inactive on-site facility. Give dates site used and closed.

None

If you were unable to answer any above questions because the information is considered confidential by your company, indicate this here and we will contact you personally.

RECEIVED

AUG 10 1981

OHIO EPA
N. W. D. O.

constituent concentration in the waste. EP toxicity tests revealed maximum total chromium and lead levels in the waste extract of 0.05 and 0.45 ppm, respectively.

B. Agency Analysis and Action

The constituents of concern in this waste are hexavalent chromium and lead. EP extracts from sludge samples analyzed by Keystone show lead and total chromium consistently well below the maximum EP toxicity limits.⁹ These low leachate levels indicate that the constituents are present in essentially an immobile form. A final pH of 8.3 indicates that Keystone's waste treatment process effectively neutralizes its spent pickle liquor wastes. The Agency, therefore, has granted a temporary exclusion to the Keystone Group's facility in Bartonville, Illinois, for its treated spent pickle liquor, as described in its petition.

IX. Mansfield Products Company

A. Petition for Exclusion

Mansfield Products Company (Mansfield), Mansfield, Ohio, involved in the manufacture of washers, dryers, ranges, and dry cleaning machines, has petitioned the Agency to exclude its treated sludge presently listed as EPA Hazardous Waste No. F006—Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. The production processes at Mansfield Products which generate the listed hazardous wastes are nickel plating and chromate conversion coating. Mansfield Products has petitioned to exclude its waste because it does not meet the criteria for which it was listed.

Mansfield has submitted a description of its electroplating and wastewater treatment processes, and EP toxicity test results for cadmium, total chromium, and nickel, and a constituent analysis for cyanide.

Mansfield's treatment process involves the batch reduction of chromic rinse waste, lime and polymer neutralization and flocculation, clarification, and vacuum filtration dewatering. Samples were collected over a 2 month period which the petitioner claims to be representative of

any variation of constituent concentration in the waste. EP toxicity tests involving cadmium, total chromium and nickel produced maximum leachate levels of <0.1, 0.1 and 12.8 ppm, respectively. Total constituent analysis for cyanide was of 5.0 ppm.

B. Agency Analysis and Action

The constituents for which EPA Hazardous Waste No. F006 are listed are cadmium, hexavalent chromium, nickel and cyanide. EP extracts show cadmium and total chromium well below the EP toxicity limits.¹⁰ Nickel extract values are also not considered to be regulatory concern.¹¹ The reported cyanide levels are not considered to be of regulatory concern. The Agency, therefore, has granted a temporary exclusion to Mansfield Product's facility in Mansfield, Ohio, for its treated wastes, as described in its petition.

X. Gould Incorporated

A. Petition for Exclusion

Gould Incorporated (Gould), involved in the manufacturing of electrical busses, has petitioned the Agency to exclude its wastewater treatment sludge presently listed as EPA Hazardous Waste No. F006—Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. Gould has petitioned to exclude its waste because it does not meet the criteria for which it was listed.

Gould's electroplating processes use copper and silver; cadmium, chromium and nickel are claimed not to be used in any of Gould's processes. Production processes used at Gould include nitric acid stripping, copper bright dip, bronze strike, copper plating, silver strike and silver plating. Cyanides are used in these processes, and Gould's treatment

em includes cyanide destruction, equalization, neutralization, caustic precipitation, clarification, lagooned storage, and plate and frame filtration.

Gould has submitted a description of its wastewater treatment process; EP toxicity test results for cadmium, total chromium, nickel, and cyanide; and total constituent analyses of the sludge for cadmium, total chromium, nickel, and free cyanide.

EP toxicity tests for cadmium, total chromium, and nickel produced maximum leachate concentrations of <0.01, <0.05, 0.26 ppm, respectively. Distilled water leachate tests for cyanide produced a maximum level of 0.059 ppm. Constituent analyses of the wastewater sludge indicated maximum cadmium, total chromium, and cyanide concentrations of 5.4, 56.0 and 118 ppm, respectively.

B. Agency Analysis and Action

The constituents for which EPA Hazardous Waste No. F006 are listed are cadmium, hexavalent chromium, nickel and cyanide. Gould has demonstrated that its copper, bronze and silver plating operations do not involve the use of cadmium or chromium. The low concentrations of cadmium and chromium in the sludge are probably a result from unknown minor sources of contamination rather than from the direct use of these constituents in the plating process. In addition, EP extracts show cadmium and total chromium¹² levels consistently below the interim primary drinking water standard. With respect to nickel, the petitioner did not provide any specific analysis for nickel in the sludge and therefore, the Agency has no data to support their claims. However, since the level of nickel in the EP extract is not considered to be of regulatory concern, the Agency has not asked the petitioner to provide any additional data. Finally, the level of free cyanide in the dewatered sludge is considered negligible and is therefore, not of regulatory concern.

The concentration of total complexed cyanides, however, is of concern to the Agency. The Agency has data indicating that complexed cyanides if exposed to sunlight may photodecompose to free cyanide (see background documents for EPA Hazardous Wastes F006 and K005). Gould has requested to empty their lagoon, and dispose of the sludge at a landfill. Gould has also requested to continue using their lagoon (after it is emptied) for sludge placement. The Agency is not presently at a point where

⁹ See footnote 2.

¹⁰ In the previous set of delisting petitions which were published in the Federal Register (40 FR 17198 March 18, 1981), the Agency had published an interim nickel leachate level of 10 ppm in considering petitions for exclusion. However, after consideration of additional nickel toxicity data, the Agency is amending the allowable nickel leachate level from 10 ppm to 20 ppm. By doing this, the Agency now believes that in most cases, the concentration of nickel in the waste extract at less than 20 ppm would not be of regulatory concern. This new level is based in part on the Agency's re-evaluation of the nickel water quality criterion value, with an upward multiplier allowing for some attenuation and dilution of the contaminant.

¹² See Footnote 2.

⁹ See Footnote 2.

22 JUL 1981

Neil Tidmore, Facilities Manager
Mansfield Products Company
94 Sherebrook Road
Mansfield, Ohio 44907

5EWHME

Dear Mr. Tidmore:

This is in response to your telephone conversation with Phil Kaplan of my staff on July 13, 1981, regarding the delisting of hazardous waste found at your Mansfield Products Company, Mansfield, Ohio facility. The Enforcement Division is in receipt of a memorandum dated May 18, 1981, from Douglas B. Farnsworth, Chief, Regulatory Branch, Legal Division, Office of Hazardous Waste Enforcement, United States Environmental Protection Agency (U.S. EPA). The memorandum indicates that the U.S. EPA has made a preliminary determination to publish in the Federal Register notice to exclude certain wastes generated at particular facilities from the list in 40 CFR Part 261, Subpart D. These wastes are to be excluded or delisted pursuant to 40 CFR 260.20 and 260.22. The delisting determination includes a waste generated at the Mansfield Products Company, Mansfield facility (EPA ID No. OH0000723601) which has an EPA Waste Number F006, wastewater treatment sludges from electroplating operations.

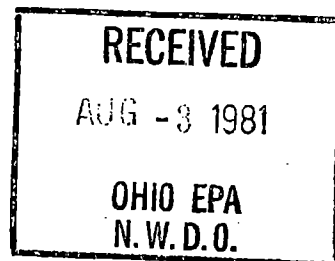
Until the delisting of the above waste becomes effective upon publication in the Federal Register, the U.S. EPA will refrain from taking enforcement action under the Resource Conservation and Recovery Act (RCRA), Subtitle C, 42 USC 6901 et seq. and 40 CFR Parts 262 and 265 relating to the handling of such waste. This assurance is conditioned upon the premise that Mansfield Products Company will handle the waste in an environmentally sound manner. Should you have any questions regarding this matter, please call Phil Kaplan at (312) 353-2114.

Very truly yours,

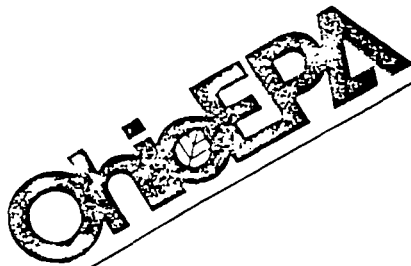
Original Signed by Sandra S. Gardebring

Sandra S. Gardebring
Director, Enforcement Division

cc: Steve White, Acting Chief
Office of Hazardous Materials Management
Ohio Environmental Protection Agency



*copies sent to
DO.*



Re: Richland County
Mansfield Products Co.
Stack Test, B006

Mr. M. Tidmore
Mansfield Products Co.
246 E. 4th Street
Mansfield, OH 44902

January 27, 1982

Dear Mr. Tidmore:

Review of the #6 boiler stack test, conducted on October 7, 1981, has been completed. At a steam flow of approximately 60,000 lb/hr (rated capacity) an average emission rate of 0.158 lb/mm BTU was achieved versus the allowed emission rate of 0.17 lb/mm BTU. As the testing followed correct procedure, this test is acceptable for both procedural and compliance purposes.

Yours truly,

A handwritten signature in dark ink, appearing to read "Gerald A. Rich", is written over a horizontal line.

Gerald A. Rich, P.E.
Group Leader, Engineering Services

kar

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

Form Approved
OMB No. 158-R0075

PAGE 13 OF 14

AIR POLLUTANT EMISSIONS REPORT (APER)

DATE REPORT SUBMITTED
4/2/81

FACILITY NAME

SECTION IV - PROCESS/OPERATING DATA
PART 3 - FUEL USAGE INFORMATION

MANSFIELD PRODUCTS CO.

1. INTERNAL ID CODE FOR PROCESS/OPERATING UNIT	9. SIZE OF COMBUSTION UNIT (See Below) 10 ⁶ BTU/hr	10. FUEL							11. AMOUNT OF FUEL USED						12. NORMAL & EXCESS AIR USED	13. FUEL SEASONAL THROUGHPUT (%)			
		a. TYPE	b. HEAT CONTENT (BTU/fuel unit)	c. % SULFUR		d. % LEAD		e. % ASH	a. ANNUAL		b. HOURLY					a. DEC-FEB	b. MAR-MAY	c. JUN-AUG	d. SEP-NOV
				Avg.	Max.	Avg.	Max.		Amount	Units	Design	Normal	Maximum	Units					
B-004	72	COAL	12,750	2.6	3.0	-	-	9	6,286	Tons	2.77	2.38	2.77	Tons	40	45	12	29	14
B-006	84	"	12,750	2.6	3.0	-	-	9	7,161	"	3.2	2.38	3.2	"	40	42	0	12	46
B-005	100	NATURAL GAS	1,050	-	-	-	-	-	94,909	MCF	100	40	80	MCF	-	40	15	6	39
P-027	.95	NATURAL GAS	1,050		-	-	-	-	2,900	MCF	.95	.90	.95	MCF	-	45	5	30	31
P-028	8.3	"	1,050		-	-	-	-	47,350	"	8.3	7.5	8.3	"	-	45	5	30	31
P-032	8.3	"	1,050	.19 GRAINS/100 CUBIC FOOT	-	-	-	-	47,350	"	8.3	7.5	8.3	"	-	45	5	30	31
P-033	.82	"	1,050		-	-	-	-	3,300	"	.82	.73	.82	"	-	45	5	30	31
P-017	2.7	"	1,050		-	-	-	-	3,500	"	2.7	2.3	2.7	"	-	45	5	30	31
P-021	5.0	"	1,050		-	-	-	-	6,840	"	5.0	4.5	5.0	"	-	45	5	30	31
P-019	5.1	"	1,050		-	-	-	-	7,000	"	4.6	5.4	5.1	"	-	45	5	30	31
P-022	10	"	1,050		-	-	-	-	12,160	"	10	8.0	10	"	-	45	5	30	31
P-023	1.5	"	1,050		-	-	-	-	2,280	"	1.5	1.2	1.5	"	-	45	5	30	31
P-024	1.5	"	1,050		-	-	-	-	2,280	"	1.5	1.2	1.5	"	-	45	5	30	31
P-012	6.1	"	1,050		-	-	-	-	3,700	"	6.1	6.1	6.1	"	-	45	5	30	31

9. SIZE OF COMBUSTION UNIT

Enter: Maximum Rated Capacity.
This item is not applicable to direct heat transfer units. If the value is not known, see the instructions.

11. USE THIS SPACE TO DEFINE THE UNITS USED ABOVE

13. SEASONAL THROUGHPUT

"DEC" in ITEM 6a refers to the year prior to the "CALENDAR YEAR OF RECORD" listed in SECTION I, ITEM 13.

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

Form Approved
OMB No. 158-R0075

PAGE 12 OF 12

AIR POLLUTANT EMISSIONS REPORT (APER)

FACILITY NAME

DATE REPORT SUBMITTED
4/2/81

**SECTION IV - PROCESS/OPERATING DATA
PART 2 - INPUT/OUTPUT INFORMATION**

MANSFIELD PRODUCTS CO.

INTERNAL ID CODE FOR PROCESS/ OPERATING UNIT	7. PROCESS/OPERATING INPUTS (See Below)											8. PROCESS/OPERATING UNIT OUTPUTS (See Below)							
	b. FEED MATERIALS	b. ANNUAL RATE		c. DAILY PROCES RATE			d. HOURLY PROCESS RATE				REID VAPOR PRESSURE (See Below)	a. PRODUCTS	b. ANNUAL RATE		c. HOURLY PROCESS RATE				
		Amount	Units	Normal	Maximum	Units	Design	Normal	Maximum	Units			Amount	Units	Design	Normal	Maximum	Units	
R-001	POLYCRON PAINT	14,950	Gal.	78.6	-	Gal.	-	9.8	-	Gal.	-	WASHER PARTS	1,900,000	Parts	-	650	750	Parts	
R-003	"	5,500	"	28.8	-	"	-	3.6	-	"	-	"	475,000	"	-	160	180	"	
R-036	"	12,100	"	64.	-	"	-	8.0	-	"	-	RANGE PARTS	550,000	"	-	360	400	"	
R-005	"	7,000	"	36.8	-	"	-	4.6	-	"	-	DRYER PARTS	1,500,000	"	-	900	950	"	
R-007	"	3,500	"	18.4	-	"	-	2.3	-	"	-	"	475,000	"	-	300	350	"	
R-010	EPON PRIMER	10,000	"	52.8	-	"	-	6.6	-	"	-	WASHER PARTS	1,900,000	"	-	650	750	"	
R-011	"	7,209	"	38.4	-	"	-	4.8	-	"	-	DRYER PARTS	1,500,000	"	-	360	400	"	
P-002	MORAM GREY	1,320	"	6.88	-	"	-	.86	-	"	-	RANGE PARTS	250,000	"	-	303	400	"	
7a. FEED MATERIALS Fuels used for combustion only should not be listed under this item. They are to be shown in SECTION IV, Part 3.		7b. REID VAPOR PRESSURE (RVP) Enter the RVP in lbs/in ² . If the rvp is not available, enter the vapor pressure in psia and specify the corresponding temperature (e.g. 3.5 @ 70° F). This item is not applicable to the storage of solid materials, and it should only be completed for feed materials containing organic liquids.										USE THIS SPACE TO DEFINE THE UNITS USED ABOVE							

BEFORE THE

NOV 16 1982

OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

Case No. 77-AI-117

Mansfield Products Company
(Applicant)

Director's Final Findings
of Fact, Conclusions of
Law, and Orders

Pursuant to Section 119.06 et seq. of the Ohio Revised Code and the rules of the Ohio Environmental Protection Agency, the Director of the Ohio Environmental Protection Agency makes the following Final Findings of Fact, Conclusions of Law, and Orders:

Findings of Fact

1. Mansfield Products Company, hereinafter "the Applicant," filed an application for a Permit to Install a 85.99MM BTU/hour coal-fired boiler in the existing boilerhouse of its Mansfield facility.
2. On April 18, 1977, and June 15, 1977, the Director of Environmental Protection issued proposed actions in which he proposed to deny the Applicant's request for a Permit to Install.
3. On May 9, 1977, and June 23, 1977, the Applicant filed requests for an adjudication hearing concerning the Director's proposed actions.
4. Subsequent to the commencement of the instant adjudicatory proceeding the Applicant completed the installation of Boiler No. 6 in the boilerhouse. As installed this boiler has a multiple-cyclone collector Model No. 6 UPO WHS No. 9-126 which is designed to control particulate matter emissions from Boiler No. 6.
5. On April 1, 1982, the parties filed a joint stipulation in the instant case in which it was agreed that a permit to install be issued for Boiler Number 6 to be followed by the issuance of a permit to operate for the boiler. Upon the permits becoming effective, the stipulation stated that the applicant would be deemed to have withdrawn its requests for an adjudication hearing and that this matter would be dismissed.
6. On May 4, 1982, the Ohio Environmental Protection Agency issued a proposed permit to install for Boiler Number 6 which was journalized and effective on June 18, 1982.
7. On September 1, 1982, the Ohio Environmental Protection Agency issued a final permit to operate for Boiler Number 6.

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: E. Norman Date 11/16/82



AIR
ROUTE

State of Ohio Environmental Protection Agency

Permit

Contaminant Source

Terms and Conditions

Date of Issuance _____

Application Number 0370010182 K002

Effective Date (upon USEPA approval)

Permit Fee \$100

This document constitutes issuance to: Mansfield Products Company

246 E. Fourth Street

Mansfield, Ohio 44902

of a permit to operate: Large Appliance Coating Line

Second Floor Primer Flowcoat Line

The following terms and conditions are hereby expressly incorporated into this permit to operate:

Condition 1

The above described air contaminant source is now operating, and over the period covered by the permit will be operated, in full compliance with all applicable state and federal laws and regulations.

Condition 2

Prior to any physical change in, or change in the method of operation of, this air contaminant source which increases the amount of any air pollutant emitted, or results in the emission of any air pollutant not previously emitted, a permit to install must be granted by the Ohio Environmental Protection Agency (See Chapter 3745-31 of the Ohio Administrative Code).

Condition 3

The Director of the Ohio Environmental Protection Agency, or his authorized representative, may enter upon the premises of the source operation at any reasonable time and subject to safety requirements of the person in control of the premises for the purpose of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants and determining compliance with all applicable State and Federal air pollution laws and regulations and the terms and conditions of this permit.

Condition 4 (This condition applicable if checked: ☐)

Upon declaration of an Air Pollution Alert, Warning or Emergency Episode this air contaminant source will follow those emission reduction procedures enumerated in the Emergency Action Plan approved by the Director for this source.

Condition 5

(3 years after
final approval

This permit to operate shall be effective until _____ by USEPA). You will be contacted approximately six months prior to this date regarding the renewal of this permit. If you are not contacted, please write to this agency.

Condition 6

A permit fee in the amount specified above must be remitted within fifteen (15) days of the effective date of this permit.

Condition 7

Any transferee of this permit shall, personally, assume the responsibilities of the original permit holder-transferor. The Ohio EPA must be notified in writing of any transfer of this permit.

Condition 8 (This condition is applicable if checked: ☐)

This permit is subject to the supplementary conditions attached.

Ohio Environmental Protection Agency
ENTERED DIRECTOR'S JOURNAL

OHIO ENVIRONMENTAL PROTECTION AGENCY

SEP 24 1986

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

Director

By: David Davis

Date

9/24/86

EPA 3834
4/12/78

mpc MANSFIELD PRODUCTS COMPANY

April 12, 1985

Certified Mail

Mr. Larry Kertcher
Chief, Air Compliance Branch
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION V
230 S. Dearborn St.
Chicago, IL 60604

RE: MANSFIELD PRODUCTS COMPANY, MANSFIELD, OH, ACB-26

Dear Mr. Kertcher:

This letter supersedes my letter of March 6, 1985.

Attached is the information required, as per request of David Kee, Director Air Management Division, dated January 29, 1985.

Coating Lines K001, K002, K003, K004, K005, K007, and K008, through elimination and combination, are now represented by:

- K001 2nd Floor Finish Line, Multiple Loop Electrostatic Discs
2nd Floor Finish Line, Electrostatic Hand Touch-Up
2nd Floor Finish Oven
- K002 2nd Floor Primer Line, Waterborne Primer Flow-Coater
2nd Floor Primer Oven
- K003 4th Floor Finish Line, Multiple Loop Electrostatic Discs
4th Floor Finish Line, Electrostatic Hand Touch-Up
4th Floor Finish Oven
- K004 D-4 Paint Line - Source shut down for several years.
- K005 3rd Floor Manual Finish Line, Electrostatic Hand Painting
3rd Floor Finish Oven
- K007 1st Floor Primer Line - Source shut down 1983.
- K008 5th Floor Primer Line, Waterborne Primer Flow-Coater
5th Floor Prime Oven

Active Emission Systems at Mansfield Products Company:

K001, K002, K003, K005 and K008 - Same as above.

...Continued

The following equipment, paint, and process modifications, with the express purpose of volatile organic compound emission reduction, have taken place at Mansfield Products Company:

1st Floor - Both gray dip paint system and Black Japan paint system were eliminated.

2nd Floor - 1. Epon primer (solvent base) was changed to waterborne primer. (1983)

2. Ransburg electrostatic rotating disc equipment (4 stations) was modified to assure greater paint thickness control by addition of D.C. control paint pump motors. (1983)

3. Close clearance paint pumps were added to prevent paint bypass during painting operations. (1983)

4. Ransburg drive motors were changed from 1800 RPM to 3600 RPM with flat rotating discs being changed to deep well discs. Both changes gave finer paint dispersion with increased transfer efficiencies. (1983)

5. Omega Loops (4) were replaced with smaller diameter loops moving ware to be painted close to electrostatic discs. This increased transfer efficiencies and reduced paint and solvent usage. (1984)

6. Devilbiss air atomized hand touch-up guns were replaced with Nordson electrostatic hand guns. (1984)

7. PPG Duracron paint, having 58.3% solids by weight, was changed to PPG Polycron Hi-Solids paint having 68.6% solids by weight. (1984)

3rd Floor - 1. Devilbiss air atomized hand touch-up guns were replaced with Nordson electrostatic hand guns. (1984)

2. PPG Duracron paint, having 58.3% by weight of solids, was changed to PPG Polycron Hi-Solids paint, having 68.6% by weight of solids. (1984)

4th Floor - 1. Ransburg electrostatic rotating disc equipment (4 stations) was modified to assure greater paint thickness control by addition of D.C. control paint pump motors. (1983)

2. Close clearance paint pumps were added to prevent paint bypass during painting operations. (1983)

3. Ransburg drive motors were changed from 1800 RPM to 3600 RPM with flat rotating discs being changed to deep well discs. Both changes gave finer paint dispersion, with increased transfer efficiencies. (1983)

4. Omega Loops (4) were replaced with smaller diameter loops moving ware to be painted close to electrostatic discs. This increased transfer efficiencies and reduced paint and solvent usage. (1984)

5. Devilbiss air atomized hand touch-up guns were replaced with Nordson electrostatic hand guns. (1984)

6. PPG Duracron paint, having 58.3% solids by weight, was changed to PPG Polycron Hi-Solids paint, having 68.6% solids by weight. (1984)

...Continued

5th Floor - 1. Epon primer (solvent base) was changed to waterborne primer. (1983)

Attached is a copy of PPG's chemical composition of volatiles, requesting business confidentiality claim for solvent components of water reducible primer paint, Duracron paint, and hi-solids Polycron paint.

If Mansfield Products Company can be of further assistance, please notify the writer.

Very truly yours,

MANSFIELD PRODUCTS COMPANY



Robert E. Corbett, Manager
Manufacturing Engineering

Attachments

cc: WCI-Cleveland - R. E. Hill

cc: MPC - W. L. Houck, T. J. Byrne

cc: OHIO E.P.A., Air Pollution Control, P.O. Box 1049, Columbus, OH 43216-1049
Charles Taylor, Chief

cc: U.S. E.P.A., Region V, 230 S. Dearborn St., Chicago, IL 60604
Dr. Frank Ekman, Air Compliance Branch

Richland County

PUBLIC NOTICE

OHIO ENVIRONMENTAL PROTECTION AGENCY

Draft Variance(s) to Operate
and
Proposed State Implementation Plan

Mansfield Products Company

PUBLIC HEARING

Public Notice is hereby given that on August 7, 1986, the Ohio Environmental Protection Agency (Ohio EPA) issued to Mansfield Products Company, 246 E. Fourth Street, Mansfield, Ohio 44902, the draft variance(s): Application #0370010182 K002 and K005. The variance(s) to operate will become effective upon approval by U.S. Environmental Protection agency as a revision to the Ohio State Implementation Plan.

The company operates a primer flowcoat line (K002) and a manual electrostatic spray line (K005) which are subject to the VOC emission requirements of OAC rule 3745-21-09(K). This draft variance to operate allows the company to employ a "bubble" control strategy for these lines (K002 and K005) in lieu of complying with OAC rule 3745-21-09(K). Under this control strategy: (a) K002 shall not exceed 2.62 lbs of VOC per gallon of coatings employed, excluding water, and the transfer efficiency of coatings employed shall not be less than 85 percent; and (b) K005 shall not exceed 3.45 lbs of VOC per gallon of coating employed, excluding water and the transfer efficiency of coatings employed shall not be less than 60%.

Notice is also given that, pursuant to Section 110 of the Clean Air Act and 40 CFR 51.4, the State of Ohio is proposing to revise the State Implementation Plan for Ozone to provide for this variance(s) to operate.

A public hearing to consider comment on the draft variance to operate and the proposed revision to the State Implementation Plan will be held as shown below.

DATE: Monday, September 22, 1986

TIME: 10:00 a.m.

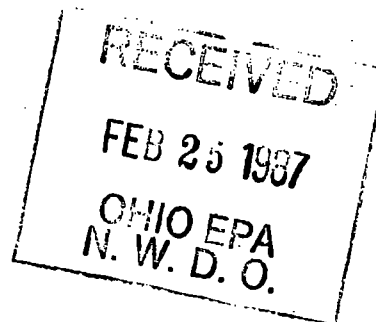
PLACE: Mansfield-Richland Health Dept., 600 West Third
Street, Mansfield, Ohio 44901

mpc MANSFIELD PRODUCTS COMPANY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

February 24, 1987

Mr. Donald R. Majewski
Environmental Scientist
OHIO E.P.A.
Northwest District Office
1035 Devlac Grove Drive
Bowling Green, OH 43402



Dear Mr. Majewski:


As set forth in Mansfield Products Company Permit 21C00003XDD, Part II, Section E, Total Toxic Organic Provisions, the October-November-December 1986 Quarterly Monitor Report is being submitted.

The Total Toxic Organic Sample was taken December 16, 1986, and the sample was analyzed by AquaTech Environmental Consultants, Inc. All the priority pollutant volatile fractions were below detectable limits expressed as UG/L.

If there are any questions, feel free to call.

Very truly yours,

MANSFIELD PRODUCTS COMPANY


F. A. Ade, Manager
Manufacturing Services
(419) 755-6485

cc: WCI Appliance Center, P.O. Box 182056, Columbus, OH 43218 -
Mr. Dan Marques

cc: MPC - Mr. W. A. Wood



**AQUA TECH
ENVIRONMENTAL
CONSULTANTS, INC.**

*P.O. BOX 76, STATE ROUTE 100, MELMORE, OHIO 44845, (419) 397-2222

P.O. BOX 436, 181 S. MAIN ST., MARION, OHIO 43302, (614) 382-5991

February 17, 1987

Mr. William Wood
Mansfield Products
246 E. 4th Street
Mansfield, OH 44903

Dear Mr. Wood:

The attached tables summarize the analytical data for Total Toxic Organics.

Any questions please give me a call at (419) 397-2659.

Sincerely,

Robert S. Glowacky /ks

Robert S. Glowacky
Melmore Laboratory Manager

ks

c:

MANSFIELD PRODUCTS
PRIORITY POLLUTANT VOLATILE FRACTION
DATE RECEIVED 12/16/86

ATEC SAMPLE NO. 13403
CLIENT SAMPLE DATE 12/16/86

ACROLEIN	< 100
ACRYLONITRILE	< 100
BENZENE	< 5.0
BROMOFORM	< 10
CARBON TETRACHLORIDE	< 5.0
CHLOROBENZENE	< 5.0
CHLORODIBROMOMETHANE	< 5.0
CHLOROETHANE	< 10
2-CHLOROETHYL VINYL ETHER	< 10
CHLOROFORM	< 5.0
DICHLOROBROMOMETHANE	< 5.0
DICHLORODIFLUOROMETHANE	< 10
1,1-DICHLOROETHANE	< 5.0
1,2-DICHLOROETHANE	< 5.0
1,1-DICHLOROETHYLENE	< 5.0
1,2-DICHLOROPROPANE	< 5.0
cis-1,3-DICHLOROPROPENE	< 5.0
trans-1,3-DICHLOROPROPENE	< 5.0
ETHYL BENZENE	< 5.0
METHYL BROMIDE	< 10
METHYL CHLORIDE	< 10
METHYLENE CHLORIDE	< 5.0
1,1,2,2-TETRACHLOROETHANE	< 5.0
TETRACHLOROETHYLENE	< 5.0
TOLUENE	< 5.0
trans-1,2-DICHLOROETHYLENE	< 5.0
1,1,1-TRICHLOROETHANE	< 5.0
1,1,2-TRICHLOROETHANE	< 5.0
TRICHLOROETHYLENE	< 5.0
TRICHLOROFLUOROMETHANE	< 10
VINYL CHLORIDE	< 10

ALL RESULTS EXPRESSED AS UG/L.

MANSFIELD PRODUCTS
PRIORITY POLLUTANT BASE-NEUTRAL FRACTION
DATE RECEIVED 12/17/86

ATEC SAMPLE NO. 13403
CLIENT SAMPLE DATE 12/16/86

ACENAPHTHENE	< 1.0
ACENAPHTHYLENE	< 1.0
ANTHRACENE	< 1.0
BENZIDINE	< 5.0
BENZO(a)ANTHRACENE	< 2.0
BENZO(a)PYRENE	< 3.0
BENZO(b)FLUORANTHENE	< 3.0
BENZO(k)FLUORANTHENE	< 3.0
BENZO(ghi)PERYLENE	< 3.0
bis(2-CHLOROETHOXY)METHANE	< 3.0
bis(2-CHLOROETHYL)ETHER	< 5.0
bis(2-CHLOROISOPROPYL)ETHER	< 5.0
bis(2-ETHYLHEXYL)PHTHALATE	< 2.0
4-BROMOPHENYL PHENYL ETHER	< 2.0
BUTYL BENZYL PHTHALATE	< 2.0
2-CHLORONAPHTHALENE	< 2.0
4-CHLOROPHENYL PHENYL ETHER	< 2.0
CHRYSENE	< 2.0
DIBENZO(a,h)ANTHRACENE	< 3.0
o-DICHLOROBENZENE	< 3.0
m-DICHLOROBENZENE	< 3.0
p-DICHLOROBENZENE	< 3.0
3,3'-DICHLOROBENZIDINE	< 5.0
DIETHYL PHTHALATE	< 2.0
DIMETHYL PHTHALATE	< 2.0
DI-n-BUTYL PHTHALATE	< 2.0
2,4-DINITROTOLUENE	< 5.0
2,6-DINITROTOLUENE	< 5.0
DI-n-OCTYL PHTHALATE	< 2.0
1,2-DIPHENYLHYDRAZINE	< 5.0
FLUORANTHENE	< 2.0
FLUORENE	< 1.0
HEXACHLOROBENZENE	< 5.0
HEXACHLOROBUTADIENE	< 10.0
HEXACHLOROCYCLOPENTADIENE	< 5.0
HEXACHLOROETHANE	< 10.0
INDENO(1,2,3-cd)PYRENE	< 3.0
ISOPHORONE	< 3.0
NAPHTHALENE	< 1.0
NITROBENZENE	< 10.0
N-NITROSODIMETHYLAMINE	< 10.0
N-NITROSO-n-PROPYLAMINE	< 5.0
N-NITROSODIPHENYLAMINE	< 5.0
PHENANTHRENE	< 1.0
PYRENE	< 2.0
1,2,4-TRICHLOROBENZENE	< 3.0

ALL RESULTS EXPRESSED AS UG/L.

MANSFIELD PRODUCTS
PRIORITY POLLUTANT ACID FRACTION
DATE RECEIVED 12/17/86

ATEC SAMPLE NO.	13403
CLIENT SAMPLE DATE	12/16/86
2-CHLOROPHENOL	< 10.0
2,4-DICHLOROPHENOL	< 20.0
2,4-DIMETHYLPHENOL	< 10.0
4,6-DINITRO-O-CRESOL	< 10.0
2,4-DINITROPHENOL	< 10.0
2-NITROPHENOL	< 10.0
4-NITROPHENOL	< 20.0
P-CHLORO-M-CRESOL	< 10.0
PENTACHLOROPHENOL	< 10.0
PHENOL	< 10.0
2,4,6-TRICHLOROPHENOL	< 10.0

ALL RESULTS EXPRESSED AS UG/L.

Ohio EPA

May 6, 1983

Mr. Rob Reash
Environmental Biology Program
Ohio State University
1735 Neil Avenue
Columbus, OH 43210

Dear Mr. Reash:

We received your letter concerning the White Westinghouse plant in Mansfield. Our investigation revealed the clarifier at the plant had a gear failure, which drove the sludge collector sweep. The east clarifier was then utilized as a back-up clarifier as defined in their Operation Manual. However, the inlet to the center well was plugged. The plant personnel then fed the east clarifier from the side. This emergency action resulted in excess turbulence at the influent entrance, which caused the reddish-brown discharge. Lastly, the company hauled 11,000 gallons of sludge to a disposal site at a cost of \$4,000.00. The worm gear cost \$2,400.00. It is my opinion that the White Westinghouse Company did everything that was humanly possible, except notify our agency. We have discussed notification with the plant and our legal staff. Additionally, the US EPA Region V office in Chicago was notified.

Your concern for the environment is appreciated very much.

In the future should you detect an environmental emergency, please call this 24 hour emergency response number -- 1-800-282-9378.

Lastly, I would like to wish you success in your field and with your project on the Rocky Fork.

Sincerely,



Paul G. Brock
District Engineer

PGB/kb

cc: File



The Ohio State University

Environmental Biology Program

1735 Neil Avenue
Columbus, Ohio 43210

Phone 614 422-5306
614 422-8772

Mr. Paul Brock
Ohio EPA
Northwest District Office
1035 Tevlac Grove Dr.
Bowling Green, Ohio 43402

Dear Mr. Brock,

My name is Rob Reash. I am a graduate student in the Environmental Biology Program at the Ohio State University. As you may have remembered from our conversation a couple of months back, I am studying the effects of chronic pollution upon the fishes in the Rocky Fork stream, which flows through Mansfield. I indicated to you that I had witnessed the White-Westinghouse effluent discharge on 28 January 1983.

Below, I have indicated the metal concentrations of water samples taken at an upstream and downstream site on 28 January 1983. If my memory is correct, I believe I gave you routine water chemistry information over the telephone. As you can see, the discharge must have contained high concentrations of iron and zinc. All metals were determined by flame atomic absorption spectrophotometry.

Site	Total metal concentration (ug/l)			
	Cr	Fe	Ni	Zn
Longview Ave. (upstream of W-W effluent)	150	980	90	20
Illinois Ave. (downstream of W-W effluent)	20	3,230	ND	2,570

I apologize for taking so long in sending you these results - I was plagued by delays beyond my control. If you need additional data concerning water chemistry, I would be glad to share any of my findings. You can leave a message (614-422-1311) or just write.

Respectfully,

Rob Reash

Ohio EPA

Re: Richland County
Mansfield Products
OEPA Permit No. 2IC00003

Mr. M. W. Tidmore
Facilities Manager
Mansfield Products Company
A Division of White-Westinghouse
Corporation
246 East Fourth Street
Mansfield, OH 44902

July 22, 1983

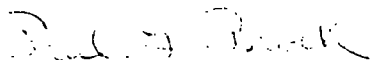
Dear Mr. Tidmore:

Our review of the May 1983, monthly operating report for the Mansfield Products Company revealed the following violations:

<u>Date</u>	<u>Outfall</u>	<u>Parameter</u>	<u>Value Reported</u>	<u>Value Permitted</u>
5/2/83	001	Nickel	1540 ug/l	1000 ug/l
5/16/83	001	Nickel	1400 ug/l	1000 ug/l
May Average	001	Nickel	866 ug/l	500 ug/l

We have not received any communication concerning these violations. Please resolve these problems. Should you have any questions, please do not hesitate to contact our office.

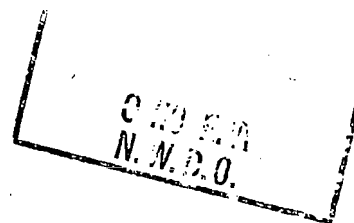
Sincerely,



Paul G. Brock
Environmental Engineer II

PGB/kb

cc: Robert Phelps, Manager, IWW, CO



Ohio EPA

Re: Richland County
Hazardous Waste
Mansfield Products
OHD000723601

Mr. Bill Wood
Mansfield Products Company
246 East Fourth Street
Mansfield, OH 44902

June 13, 1984

Dear Mr. Wood:

On June 12, 1984, Kevin Clouse, Ohio EPA, Northwest District Office, conducted an inspection of your facility which was represented by yourself. At that time the following deficiencies were noted as referenced by the enclosed inspection form:

Part 2 (5)

The generator needs to label and placard all hazardous waste prior to transport as required by 40 CFR 262.30 through 262.33.

Part 2 (8)(9)

All employee training must be carried out and an annual refresher course offered at the facility. Employee training must be documented along with written job titles and descriptions for all personnel involved in hazardous waste activities as required under 40 CFR 265.16(a-e). This is a requirement of the Ohio Administrative Code (OAC) 3745-65-16(a-e).

Subpart D (1-4)

The facility needs to prepare a written contingency plan. Please address all points specified in the enclosed inspection form to meet the regulations set by 40 CFR 265.51 through 265.56. This is a requirement of OAC 3745-65-52 through 3745-65-56.

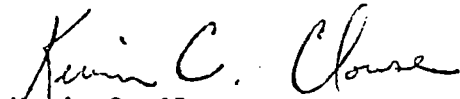
Subpart I (2)

All containers used to store hazardous waste should be closed as required by CFR 265.173(a). A requirement of OAC 3745-66-73(A).

Mr. Bill Wood
June 13, 1984
Page 2

Please send corrections to the above stated deficiencies within 30 days of the date of this letter. If you have any questions about the inspection, please call me at (419) 352-8461.

Sincerely,



Kevin C. Clouse
Environmental Scientist

KCC/kb

Enclosure

cc: Paula Cotter, DSHWM, CO

RCCA INTERIM STATUS INSPECTION FORM

PART 2. GENERATOR REQUIREMENTS

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
1. The hazardous waste(s) generated at this facility have been tested or are acknowledged to be hazardous waste(s) as defined in Section 261 and in compliance with the requirements of Sections 262.11.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Does this facility generate any hazardous wastes that are excluded from regulation under Section 261.4 (statutory exclusions) or Section 261.6 (recycle/reuse)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Does this facility have waste or waste treatment equipment that is excluded from regulation because of totally enclosed treatment (Section 265.1(c)(9)) or via operation of an elementary neutralization unit and/or wastewater treatment unit (Section 265.1(c)(10)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. The generator meets the following requirements with respect to the preparation, use and retention of the hazardous waste manifest:				
a) The manifest form used contains all of the information required by Section 262.21(a) and (b) and the minimum number of copies required by Section 262.22.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) The generator has designated at least one permitted disposal facility and has/will designate an alternate facility or instructions to return waste in compliance with Section 262.20.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Prepared manifests have been signed by the generator and initial transporter in compliance with Section 262.23.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d) The generator has complied with manifest exception reporting requirements (investigate after 35 days, report after 45 days) in Section 262.42(a), (b)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e) Signed copies of all hazardous waste manifests and any documentation required for Exception Reports are retained for at least 3 years as required by Section 262.40.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

RCRA INTERIM STATUS INSPECTION FORM

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
5. The generator meets the following hazardous waste pre-transport requirements:				
a) Prior to offering hazardous wastes for transport off-site the waste material is packaged, labeled and marked in accord with applicable DOT regulations (Section 262.30, 262.31 and 262.32(a))	<input checked="" type="checkbox"/>			DOOS WHITE TANKS WERE NOT MARKED CHECK
b) Prior to offering hazardous wastes for transport off-site each container with a capacity of 110 gallons (416 liters) <u>or less</u> is affixed with a completed hazardous waste label as required by Section 262.32(b).	<input checked="" type="checkbox"/>			CHECK
c) The generator meets requirements for properly placarding or offering to properly placard the initial transporter of the waste material in compliance with Section 262.33.	<input checked="" type="checkbox"/>			
6. Hazardous wastes imported from or exported to foreign countries are handled in accordance with the requirements of Section 262.50.			<input checked="" type="checkbox"/>	
7. If the generator elects to store hazardous waste on-site in <u>containers</u> or <u>tanks</u> for <u>90 days</u> or less without a RCRA storage permit as provided under Section 262.34, the following requirements with respect to such storage are met:				
a) The containers are clearly marked with the words "Hazardous Waste".	<input checked="" type="checkbox"/>			
b) The date that accumulation began is clearly marked on each container.				
8. The generator has provided a Personnel Training Program in compliance with Section 265.16(a)(b)(c) including instruction in safe equipment operation and emergency response procedures, training new employees within 6 months and providing an annual training program refresher course (Section 262.34).	<input checked="" type="checkbox"/>			
9. The generator keeps all of the records required by Section 265.16(d)(e) including written job titles, job descriptions and documented employee training records (Section 262.34).				

X

Subpart D: Contingency and Emergency

Remark #

1. The facility has a written Contingency Plan designed to minimize hazards from fires, explosions or unplanned releases of hazardous wastes (265.51) and contains the following components:
 - a) Actions to be taken by personnel in the event of an emergency incident.
 - b) Arrangements or agreements with local or state emergency authorities.
 - c) Names, addresses and telephone numbers of all persons qualified to act as emergency coordinator.
 - d) A list of all emergency equipment including location, physical description and outline of capabilities.
 - e) If required due to the actual hazards associated with the waste(s) handled, an evacuation plan for facility personnel. (265.51(f))
2. A copy of the Contingency Plan and any plan revisions is maintained on-site and has been submitted to all local and state emergency service authorities that might be required to participate in the execution of the plan. (265.53)
3. The plan is revised in response to facility, equipment and personnel changes or failure of the plan. (265.54)
4. An emergency coordinator is designated at all times (on-site or on-call) is familiar with all aspects of site operation and emergency procedures and has the authority to implement all aspects of the Contingency Plan. (265.56)
5. If an emergency situation has occurred, the emergency coordinator has implemented all or part of the Contingency Plan and has taken all of the actions and made all of the notifications deemed necessary under Sections 265.56.

RCRA INTERIM STATUS INSPECTION FORM

Subpart C: Preparedness and Prevention

1. Has there been a fire, explosion or non-planned release of hazardous waste at this facility? (265.31)
2. If required due to actual hazards associated with the waste material, the facility has the following equipment: (265.32)
 - a) Internal alarm system.
 - b) Access to telephone, radio or other device for summoning emergency assistance.
 - c) Portable fire control equipment.
 - d) Water at adequate volume and pressure via hoses sprinkler, foamers or sprayers.
3. All required safety, fire and communications equipment is tested and maintained as necessary; testing and maintenance are documented. (265.33)
4. If required due to the actual hazards associated with the waste material, personnel have immediate access to an emergency communication device during times when hazardous waste is being physically handled. (265.34)
5. If required due to the actual hazards associated with the waste material, adequate aisle space to allow unobstructed movement or emergency or spill control equipment is maintained. (265.35)
6. If required due to the actual hazards associated with the waste material, the facility has attempted to make appropriate arrangements with local emergency service authorities to familiarize them with the possible hazards and the facility layout. (265.37(a))
7. Where state or local emergency service authorities have declined to enter into any proposed special arrangements or agreements the refusal has been documented. (265.37(b))

Yes	No	N/A	Remark //
	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			

RCRA INTERIM STATUS INSPECTION FORM

PART 5. TREATMENT/STORAGE/DISPOSAL

SUBPARTS INCLUDED

I: Management of Containers	L: Waste Piles	O: Incinerators
J: Management of Tanks	M: Land Treatment	P: Thermal Treatment
K: Surface Impoundments	N: Landfills	Q: Chemical/Physical/Biological Treatment

Subpart I: Management of Containers

1. Hazardous wastes are stored in containers which are:

- a) Closed (265.173)
- b) In good physical condition (265.171)
- c) Compatible with the wastes stored in them (265.172)

2. Containers are stored closed except when it is necessary to add or remove wastes. (265.173(a))

3. Hazardous waste containers are not stored, handled or opened in a manner which may rupture the container or cause it to leak. (265.173(b))

4. The area where containers are stored is inspected for evidence of leaks or corrosion at least weekly and such inspections are documented. (265.174)

5. Containers holding Ignitable or Reactive waste(s) are located at least 50 feet (15 meters) from the property line and the general requirements for handling such wastes in Section 265.17 (physical separation, signs and safety) are met (265.176).

6. Containers holding hazardous wastes are never stored near other materials which may interact with the waste in a hazardous manner. (265.177(c))

Yes	No	N/A	Remarks	#
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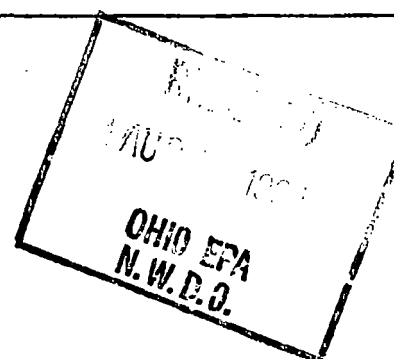
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Some Containers did not have lids	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

mpc MANSFIELD PRODUCTS COMPANY

Richland Co
file: H.W.

August 10, 1984

Mr. Kevin Clouse, Environmental Scientist
OHIO ENVIRONMENTAL PROTECTION AGENCY
Northwest District Office
1035 Devlac Grove Drive
Bowling Green, OH 43402-4598



REF: RICHLAND COUNTY HAZARDOUS WASTE
MANSFIELD PRODUCTS CO. OHD000723601

Dear Mr. Clouse:

This is the written response to the June 12, 1984 inspection at Mansfield Products Company, and your letter dated June 13, 1984 outlining deficiencies as noted in the inspection form. The response follows in order to the items set forth in your letter of June 13, 1984:

PART 2(5)

The generator will label and placard all hazardous waste prior to transport. The D005 barrels in the Vit Plant are being labeled as required.

PART 2 (8)(9)

An employee training program and an annual refresher course will be offered for all personnel involved in hazardous waste activities, and the training sessions will be documented.

SUB-PART D (1-4)

A written contingency plan has been written and is attached.

SUB-PART (2)

All containers used to store hazardous waste will be closed when filled. The barrels containing D005 hazardous waste (Enamel Floor Sweepings) now have lids or are closed.

Mansfield Products Company, as we understand them, has corrected the deficiencies as set forth in your letter of June 28, 1984. We will not obtain a permit to haul hazardous wastes. We will hire a hauler who has the proper permit. If there are any questions, feel free to call.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

W A Wood
W. A. Wood, Supervisor
Plant Engineering

Attachment

cc: WCI-Cleveland - R. E. Hill
cc: MPC - W. L. Houck, A. L. Kelley

MANSFIELD PRODUCTS COMPANY

HAZARDOUS WASTE CONTINGENCY PLAN (PREPARED BY W. A. WOOD, JUNE 28, 1984)

MANSFIELD PRODUCTS COMPANY
246 E. Fourth St.
Mansfield, OH 44902
(419) 755-6333

IN-PLANT EMERGENCY TELEPHONE NUMBERS

<u>NAME</u>	<u>TITLE</u>	<u>EXT.</u>	<u>HOME</u>
W. L. Houck	Mgr., Mfg. Services	486	
J. P. Clerkin	Maintenance Superintendent	281	Call Plant Guard, Ext. 333.
J. Elkins	Maint. Foreman - 2nd	354	Plant Guard to contact
S. E. Cox	Maint. Foreman - 3rd	354	employees at home when
G. R. Crawford	Supvr., Waste Treatment	481	required.
D. E. Downs	Maint. Foreman - 1st	354	
J. Meadows	Fire Marshal	351	
W. A. Wood	Supvr., Plant Engineering	232	
Plant Guard		333	

The above listed personnel are to be notified and are qualified to take action in the event of an emergency incident. They will respond to minimize hazards from fires, explosions, or unplanned release of hazardous wastes.

HAZARDOUS WASTE

Mansfield Products Company generates two types of hazardous wastes:

1. Enamel Floor Sweepings, generated in X-Building and Mill Room. The material is the dried or moist enamel dust-like material which is inert, will not burn or explode. It is declared hazardous because the material fails the EP Toxicity Test for normal landfill disposal. The enamel floor sweepings exceed the Barium allowable limit; therefore, are classified as D005, and are to be handled and disposed of as a hazardous waste.

The floor sweepings are to be placed in a 55-gallon drum. When the drum is full, a lid is to be installed on the drum. The approved label is to be placed on the drum, properly filled out and dated.

GENERATOR NUMBER OHD000723601
CLASSIFICATION D005

The drums are to be stored (less than six months) for disposal.

Fire - Does not apply.
Explosion - Does not apply.

Unplanned Release

Care must be taken to dispose of the Floor Sweepings in drums; thus, all Floor Sweepings must be placed in the drums. If a drum leaks, or is spilled, the material must be swept up and placed in another approved drum.

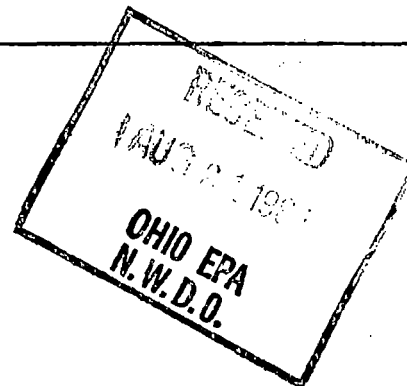
...CONTINUED OVER

2. Trichloroethane , or Trichlorethylene Waste, will be tagged by the department using it before moving to the Salvage Department for temporary storage.

In case of accidental spill, the liquid will be kept out of drains by containing with Quick-Dri, or similar material. Call the Maintenance Foreman to take the necessary action to clean up the spilled liquid. The liquid will not burn or explode.

Drums are to be kept closed. Approved labels will be installed on drum body and top. Weekly inspections will be completed and documented.

K. J. Hill
B. R. Kelley



August 20, 1984

Mr. Kevin Clouse
Environmental Specialist
OHIO ENVIRONMENTAL PROTECTION AGENCY
Northwest District Office
1035 Devlac Grove Drive
Bowling Green, OH 43402-4598

REF: RICHLAND COUNTY HAZARDOUS WASTE
MANSFIELD PRODUCTS CO. OHD000723601

Dear Mr. Clouse:

Please refer to my letter to you dated August 10, 1984.

Attached is a corrected copy of our Hazardous Waste Contingency Plan.

The only correction is under No. 1 - Drums are to be stored (less than 90 days) for disposal, rather than less than six months.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

W. A. Wood

W. A. Wood, Supervisor
Plant Engineering

Attachment

cc: WCI-Cleveland - R. E. Hill
cc: MPC - W. L. Houck, A. L. Kelley

MANSFIELD PRODUCTS COMPANY

HAZARDOUS WASTE CONTINGENCY PLAN (PREPARED BY W. A. WOOD, JUNE 28, 1984)

MANSFIELD PRODUCTS COMPANY
246 E. Fourth St.
Mansfield, OH 44902
(419) 755-6333

IN-PLANT EMERGENCY TELEPHONE NUMBERS

<u>NAME</u>	<u>TITLE</u>	<u>EXT.</u>	<u>HOME</u>
W. L. Houck	Mgr., Mfg. Services	486	
J. P. Clerkin	Maintenance Superintendent	281	Call Plant Guard, Ext. 333.
J. Elkins	Maint. Foreman - 2nd	354	Plant Guard to contact
S. E. Cox	Maint. Foreman - 3rd	354	employees at home when
G. R. Crawford	Supvr., Waste Treatment	481	required.
D. E. Downs	Maint. Foreman - 1st	354	
J. Meadows	Fire Marshal	351	
W. A. Wood	Supvr., Plant Engineering	232	
Plant Guard		333	

The above listed personnel are to be notified and are qualified to take action in the event of an emergency incident. They will respond to minimize hazards from fires, explosions, or unplanned release of hazardous wastes.

HAZARDOUS WASTE

Mansfield Products Company generates two types of hazardous wastes:

1. Enamel Floor Sweepings, generated in X-Building and Mill Room. The material is the dried or moist enamel dust-like material which is inert, will not burn or explode. It is declared hazardous because the material fails the EP Toxicity Test for normal landfill disposal. The enamel floor sweepings exceed the Barium allowable limit; therefore, are classified as D005, and are to be handled and disposed of as a hazardous waste.

The floor sweepings are to be placed in a 55-gallon drum. When the drum is full, a lid is to be installed on the drum. The approved label is to be placed on the drum, properly filled out and dated.

GENERATOR NUMBER OHD000723601
CLASSIFICATION D005

The drums are to be stored (less than 90 days) for disposal.

Fire - Does not apply.
Explosion - Does not apply.

Unplanned Release

Care must be taken to dispose of the Floor Sweepings in drums; thus, all Floor Sweepings must be placed in the drums. If a drum leaks, or is spilled, the material must be swept up and placed in another approved drum.

2. Trichloroethane , or Trichlorethylene Waste, will be tagged by the department using it before moving to the Salvage Department for temporary storage.

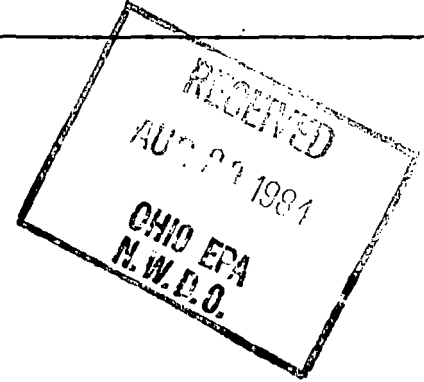
In case of accidental spill, the liquid will be kept out of drains by containing with Quick-Dri, or similar material. Call the Maintenance Foreman to take the necessary action to clean up the spilled liquid. The liquid will not burn or explode.

Drums are to be kept closed. Approved labels will be installed on drum body and top. Weekly inspections will be completed and documented.

mpc MANSFIELD PRODUCTS COMPANY

file: Richland
co H.W.

August 28, 1984



Mr. Kevin Clouse
Environmental Scientist
OHIO E.P.A.
Northwest District Office
1035 Devlac Grove Drive
Bowling Green, OH 43402-4598

RE: RICHLAND COUNTY HAZARDOUS WASTE
MANSFIELD PRODUCTS CO. - OHD000723601

Dear Mr. Clouse:

Attached is a revised Hazardous Waste Contingency Plan which includes phone numbers in the section pertaining to liquid spills.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

W. A. Wood
Supervisor
Plant Engineering

Attachment

cc: WCI-Cleveland - R. E. Hill
MPC - W. L. Houck, A. L. Kelley

mpc MANSFIELD PRODUCTS COMPANY

HAZARDOUS WASTE CONTINGENCY PLAN (PREPARED BY W. A. WOOD, JUNE 28, 1984)

MANSFIELD PRODUCTS COMPANY
246 E. Fourth St.
Mansfield, OH 44902
(419) 755-6333

IN-PLANT EMERGENCY TELEPHONE NUMBERS

<u>NAME</u>	<u>TITLE</u>	<u>EXT.</u>	<u>HOME</u>
W. L. Houck	Mgr., Mfg. Services	486	
J. P. Clerkin	Maintenance Superintendent	281	Call Plant Guard, Ext. 333.
J. Elkins	Maint. Foreman - 2nd	354	Plant Guard to contact
S. E. Cox	Maint. Foreman - 3rd	354	employees at home when
G. R. Crawford	Supvr., Waste Treatment	481	required.
D. E. Downs	Maint. Foreman - 1st	354	
J. Meadows	Fire Marshal	351	
W. A. Wood	Supvr., Plant Engineering	232	
Plant Guard		333	

The above listed personnel are to be notified and are qualified to take action in the event of an emergency incident. They will respond to minimize hazards from fires, explosions, or unplanned release of hazardous wastes.

HAZARDOUS WASTE

Mansfield Products Company generates two types of hazardous wastes;

1. Enamel Floor Sweepings, generated in X-Building and Mill Room. The material is the dried or moist enamel dust-like material which is inert, will not burn or explode. It is declared hazardous because the material fails the EP Toxicity Test for normal landfill disposal. The enamel floor sweepings exceed the Barium allowable limit; therefore, are classified as D005, and are to be handled and disposed of as a hazardous waste.

The floor sweepings are to be placed in a 55-gallon drum. When the drum is full, a lid is to be installed on the drum. The approved label is to be placed on the drum, properly filled out and dated.

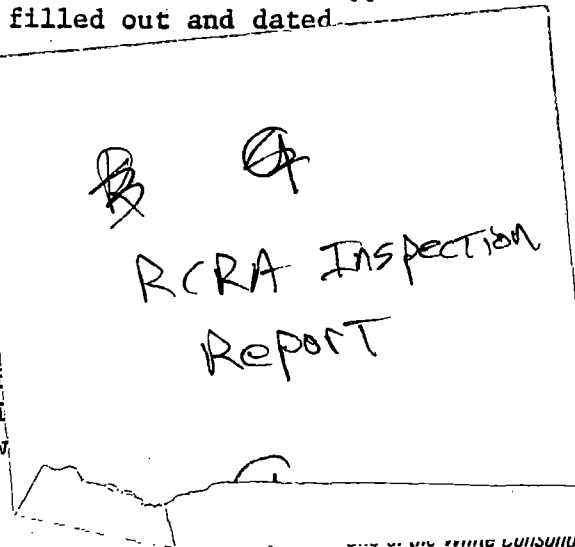
GENERATOR NAME
CLASSIFICATION

The drums are to be stored (less than 90 days)

Fire
Explosion

Unplanned Release

Care must be taken to dispose of Floor Sweepings must be placed in a 55-gallon drum. If spilled, the material must be swept up and placed in a 55-gallon drum.



, all
ed drum.

NUED OVER
INDUSTRIES

2. Trichloroethane , or Trichlorethylene Waste, will be tagged by the department using it before moving to the Salvage Department for temporary storage.

In case of accidental spill, the liquid will be kept out of drains by containing with Quick-Dri, or similar material. Call the Maintenance Foreman to take the necessary action to clean up the spilled liquid. The liquid will not burn or explode.

Drums are to be kept closed. Approved labels will be installed on drum body and top. Weekly inspections will be completed and documented.

MAINTENANCE SUPERINTENDENT - (419) 755-6281

MAINTENANCE FOREMAN - 2ND - (419) 755-6354

MAINTENANCE FOREMAN - 3RD - (419) 755-6354

PLANT GUARD - (419) 755-6333

6/12/84 1:00 P
Date and Time of Inspection

RCRA INTERIM STATUS INSPECTION FORM

HWFAB #

PART 1. GENERAL INFORMATION

U.S. EPA I.D. # OH D00723601

Facility: Manfield Products Co. Address: 246 East Fourth St. City: Manfield
State: Ohio Zip Code: 44902 County: Richland Telephone: 419-755-~~1546~~6011

NEW #

INSPECTION PARTICIPANTS(S)

	(Name)	(Title)	(Telephone)
1.	<u>BILL WOOD</u>	<u>ENV. ENG.</u>	<u>419-755-6011</u>
2.			
3.			

INSPECTOR(S)

1.	<u>KEVIN CLOUSE</u>	<u>ENV. SCIENTIST</u>	
2.			
3.			

X INSTALLATION ACTIVITY

Mark One

- ☒ Generator only (G)
- ☐ Transporter (T)
- ☐ TSDF only
- ☐ G-T
- ☐ G-TSDF
- ☐ T-TSDF
- ☐ G-T-TSDF

If the site is a TSDF, check the boxes indicating which regulations are applicable.

- | | |
|---|---|
| <input type="checkbox"/> General Facility Standards, Preparedness and Prevention, Contingency and Emergency, Manifests/Records/Reporting, Closure | <input type="checkbox"/> Waste Piles S03 |
| <input checked="" type="checkbox"/> Containers S01 | <input type="checkbox"/> Land Treatment D81 |
| <input type="checkbox"/> Tanks S02/T01 | <input type="checkbox"/> Landfills D80 |
| <input type="checkbox"/> Surface Impoundments S04/T02 | <input type="checkbox"/> Chemical/Physical/Biological T04 |
| <input type="checkbox"/> Incineration/Thermal Treatment | <input type="checkbox"/> Groundwater Monitoring |
| | <input type="checkbox"/> Post-Closure |

RCRA INTERIM STATUS INSPECTION FORM

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
1. Has the facility submitted a Part A to Ohio?	—	—	✓	—
2. If "yes", is it complete and accurate?	—	—	✓	—
3. Has the facility submitted a Part B?	—	—	✓	—

REMARKS, PART 1. GENERAL INFORMATION

Include a brief description of site activity and waste handling.

Metal finishing of Washers & Drums
waste facility in modification '81

Barium fity sweeping 0005 reduced activity at plant
enamel to Rich L.F. 2 barrels/week

FOO5 Trichlorethane sent off site for recycling

RCRA INTERIM STATUS INSPECTION FORM

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
5. The generator meets the following hazardous waste pre-transport requirements:				
a) Prior to offering hazardous wastes for transport off-site the waste material is packaged, labeled and marked in accord with applicable DOT regulations (Section 262.30, 262.31 and 262.32(a))	<u> </u>	<u>✓</u>	<u> </u>	<u>DOOS WASTE TANKS WERE NOT MARKED CHECK</u>
b) Prior to offering hazardous wastes for transport off-site each container with a capacity of 110 gallons (416 liters) <u>or less</u> is affixed with a completed hazardous waste label as required by Section 262.32(b).	<u> </u>	<u>✓</u>	<u> </u>	<u>CHECK</u>
c) The generator meets requirements for properly placarding or offering to properly placard the initial transporter of the waste material in compliance with Section 262.33.	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
6. Hazardous wastes imported from or exported to foreign countries are handled in accordance with the requirements of Section 262.50.	<u> </u>	<u> </u>	<u>✓</u>	<u> </u>
7. If the generator elects to store hazardous waste on-site in <u>containers</u> or <u>tanks for 90 days</u> or less without a RCRA storage permit as provided under Section 262.34, the following requirements with respect to such storage are met:				
a) The containers are clearly marked with the words "Hazardous Waste".	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
b) The date that accumulation began is clearly marked on each container.	<u> </u>	<u> </u>	<u> </u>	<u> </u>
8. The generator has provided a Personnel Training Program in compliance with Section 265.16(a)(b)(c) including instruction in safe equipment operation and emergency response procedures, training new employees within 6 months and providing an annual training program refresher course (Section 262.34).	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
9. The generator keeps all of the records required by Section 265.16(d)(e) including written job titles, job descriptions and documented employee training records (Section 262.34).	<u> </u>	<u> </u>	<u> </u>	<u> </u>

RCRA INTERIM STATUS INSPECTION FORM

PART 2. GENERATOR REQUIREMENTS

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
1. The hazardous waste(s) generated at this facility have been tested or are acknowledged to be hazardous waste(s) as defined in Section 261 and in compliance with the requirements of Sections 262.11.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Does this facility generate any hazardous wastes that are excluded from regulation under Section 261.4 (statutory exclusions) or Section 261.6 (recycle/reuse)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Does this facility have waste or waste treatment equipment that is excluded from regulation because of totally enclosed treatment (Section 265.1(c)(9)) or via operation of an elementary neutralization unit and/or wastewater treatment unit (Section 265.1(c)(10)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. The generator meets the following requirements with respect to the preparation, use and retention of the hazardous waste manifest:				
a) The manifest form used contains all of the information required by Section 262.21(a) and (b) and the minimum number of copies required by Section 262.22.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) The generator has designated at least one permitted disposal facility and has/will designate an alternate facility or instructions to return waste in compliance with Section 262.20.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Prepared manifests have been signed by the generator and initial transporter in compliance with Section 262.23.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d) The generator has complied with manifest exception reporting requirements (investigate after 35 days, report after 45 days) in Section 262.42(a), (b)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e) Signed copies of all hazardous waste manifests and any documentation required for Exception Reports are retained for at least 3 years as required by Section 262.40.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

RCRA INTERIM STATUS INSPECTION FORM

Subpart C: Preparedness and Prevention

1. Has there been a fire, explosion or non-planned release of hazardous waste at this facility? (265.31)
2. If required due to actual hazards associated with the waste material, the facility has the following equipment: (265.32)
 - a) Internal alarm system.
 - b) Access to telephone, radio or other device for summoning emergency assistance.
 - c) Portable fire control equipment.
 - d) Water at adequate volume and pressure via hoses sprinkler, foamers or sprayers.
3. All required safety, fire and communications equipment is tested and maintained as necessary; testing and maintenance are documented. (265.33)
4. If required due to the actual hazards associated with the waste material, personnel have immediate access to an emergency communication device during times when hazardous waste is being physically handled. (265.34)
5. If required due to the actual hazards associated with the waste material, adequate aisle space to allow unobstructed movement or emergency or spill control equipment is maintained. (265.35)
6. If required due to the actual hazards associated with the waste material, the facility has attempted to make appropriate arrangements with local emergency service authorities to familiarize them with the possible hazards and the facility layout. (265.37(a))
7. Where state or local emergency service authorities have declined to enter into any proposed special arrangements or agreements the refusal has been documented. (265.37(b))

<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>			

X

Subpart D: Contingency and Emergency

<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Remark #</u>
------------	-----------	------------	-----------------

1. The facility has a written Contingency Plan designed to minimize hazards from fires, explosions or unplanned releases of hazardous wastes (265.51) and contains the following components:
 - a) Actions to be taken by personnel in the event of an emergency incident.
 - b) Arrangements or agreements with local or state emergency authorities.
 - c) Names, addresses and telephone numbers of all persons qualified to act as emergency coordinator.
 - d) A list of all emergency equipment including location, physical description and outline of capabilities.
 - e) If required due to the actual hazards associated with the waste(s) handled, an evacuation plan for facility personnel. (265.51(f))
2. A copy of the Contingency Plan and any plan revisions is maintained on-site and has been submitted to all local and state emergency service authorities that might be required to participate in the execution of the plan. (265.53)
3. The plan is revised in response to facility, equipment and personnel changes or failure of the plan. (265.54)
4. An emergency coordinator is designated at all times (on-site or on-call) is familiar with all aspects of site operation and emergency procedures and has the authority to implement all aspects of the Contingency Plan. (265.56)
5. If an emergency situation has occurred, the emergency coordinator has implemented all or part of the Contingency Plan and has taken all of the actions and made all of the notifications deemed necessary under Sections 265.56.

RCRA INTERIM STATUS INSPECTION FORM

PART 5. TREATMENT/STORAGE/DISPOSAL

SUBPARTS INCLUDED

I: Management of Containers	L: Waste Piles	O: Incinerators
J: Management of Tanks	M: Land Treatment	P: Thermal Treatment
K: Surface Impoundments	N: Landfills	Q: Chemical/Physical/Biological Treatment

Subpart I: Management of Containers

1. Hazardous wastes are stored in containers which are:

- a) Closed (265.173)
- b) In good physical condition (265.171)
- c) Compatible with the wastes stored in them (265.172)

2. Containers are stored closed except when it is necessary to add or remove wastes. (265.173(a))

3. Hazardous waste containers are not stored, handled or opened in a manner which may rupture the container or cause it to leak. (265.173(b))

4. The area where containers are stored is inspected for evidence of leaks or corrosion at least weekly and such inspections are documented. (265.174)

5. Containers holding Ignitable or Reactive waste(s) are located at least 50 feet (15 meters) from the property line and the general requirements for handling such wastes in Section 265.17 (physical separation, signs and safety) are met (265.176).

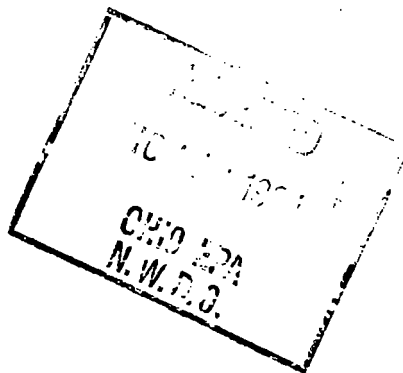
6. Containers holding hazardous wastes are never stored near other materials which may interact with the waste in a hazardous manner. (265.177(c))

Yes	No	N/A	Remark #
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Some Containers did not have lids
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

mpc MANSFIELD PRODUCTS COMPANY

November 15, 1984

Mr. Ben Chambers, Supervisor
Division Solid & Hazardous Waste Management
OHIO ENVIRONMENTAL PROTECTION AGENCY
Northwest District Office
1035 Devlac Grove Drive
Bowling Green, OH 43402



SUBJECT: ENAMEL FLOOR SWEEPINGS (ENAMEL DUST)
CHANGE FROM HAZARDOUS (D005) TO NON-HAZARDOUS

Dear Mr. Chambers:

As we discussed in our telephone conversation November 14, 1984, I am sending you the EP toxicity test reports of our enamel floor sweepings (enamel dust). On November 3, 1980, the EP toxicity test results showed Barium at 197 Mg/L, over the allowed limit; therefore, the enamel dust, an unlisted material, was declared hazardous (D005), and the material was disposed of in the Richland County Landfill Hazardous Section.

New EP toxicity tests were performed on October 18, 1984 and November 9, 1984 on the enamel floor sweepings (enamel dust), and the Barium materials were within limit. The other parameters were within limits; therefore, Mansfield Products Company is declaring the material non-hazardous, and would like your permission to dispose of it in the Richland County Landfill. An average of two drums of the material is generated per week.

There is no easy explanation of why the material was hazardous in 1980 and non-hazardous today. The enamel supplies indicate that Barium could vary in some of the base materials in the frit; therefore, as discussed, Mansfield Products Company will test several other future batches of the material to verify that the material continues to be non-hazardous.

If there are any questions or comments, feel free to call.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

W. A. Wood, Supervisor
Plant Engineering
(419) 755-6232

cc: WCI-Cleveland - R. E. Hill
MPC - W. L. Houck

Water Management, Inc.

2480 Broadway Avenue
Cleveland, Ohio 44115

Phone: (216) 566-8090

ANALYSIS CERTIFIED BY: J. Howard Sanders

Director

Date: 11-9-84

Client **Mansfield Products**
246 East Fourth Street
Mansfield, Ohio 44902
Attn: Bill Wood

P.O. No. 703126
W.O. No. Special - 199
Sample Recd: 11-1-84
Sample No. See Below
Phone: _____

Source/Comments #1 - Finish Coat 10-28-84
Analysis performed in accordance with CFR 40-261 Appendix II
for EP toxicity characteristics.

ANALYSIS: Metal results in (ug/1) ppb, all other results in (mg/1) ppm, unless otherwise noted.

	1	2	3	4		1	2	3	4
Acidity - T (CaCO ₃)					Mercury	ppm	<0.05		
Free (MO) (CaCO ₃)					Nickel	ppm	1.72		
Alkalinity - T (CaCO ₃)					Potassium				
phth (CaCO ₃)					Selenium	ppm	<0.02		
Bact: T. Coli COL/100 ml					Sodium				
Fecal Coli COL/100 ml					Tin				
T Plate COL/100ml					Zinc				
Bromide					Nitrogen: Nitrate (N)				
Boron					Nitrite (N)				
Chloride					Ammonia (N)				
Chlorine: Res.					Organic (N)				
Demand					T Kjeldahl (N)				
Color					Odor				
Conductivity					Oil & Grease				
Cyanide: Total					Oxygen Demand: BOD ₅				
Amenable					COD				
Free					Oxygen Dissolved				
Fluoride					pH				
Hardness: T (CaCO ₃)					Phenols				
Ca (CaCO ₃)					Phosphorus: Total (P)				
Mg (CaCO ₃)					Ortho (P)				
MBAS					Poly (P)				
Metals: Aluminum					Residue: Total				
Arsenic	ppm	<0.01			Total Vol				
Cadmium	ppm	0.02			Suspended				
Calcium					Vol Suspended				
Chromium: Total	ppm	<0.01			Settleable				
Hexavalent					Silica				
Trivalent					Sulfide				
Cobalt					Sulfite				
Copper					Sulfate				
Iron					TOC				
Lead	ppm	0.03			Turbidity (JTU)				
Manganese					Barium	ppm	3.01		
Magnesium					Silver	ppm	<0.01		

Sampling Method: By Client X By WMI _____ Auto Sampler _____ Other _____

Water Management, Inc.

2480 Broadway Avenue
Cleveland, Ohio 44115

Phone: (216) 566-8090

ANALYSIS CERTIFIED BY: J. Howard Sanders

Director

Date: 11-9-84

Client **Mansfield Products**
246 East Fourth Street
Mansfield, Ohio 44902
Attn: Bill Wood

P.O. No. 703126
W.O. No. Special - 199
Sample Recd: 11-1-84
Sample No. See Below
Phone: _____

Source/Comments #1 - Finish Coat - Almond White 10-28-84
Analysis performed in accordance with CFR 40-261 Appendix II for
E.P. Toxicity characteristics

ANALYSIS: Metal results in (ug/1) ppb, all other results in (mg/1) ppm, unless otherwise noted.

	1	2	3	4		1	2	3	4
Acidity - T (CaCO ₃)					Mercury	ppm	<0.05		
Free (MO) (CaCO ₃)					Nickel	ppm	0.09		
Alkalinity - T (CaCO ₃)					Potassium				
phth (CaCO ₃)					Selenium	ppm	<0.02		
Bact: T. Coli COL/100 ml					Sodium				
Fecal Coli COL/100 ml					Tin				
T Plate COL/100ml					Zinc				
Bromide					Nitrogen: Nitrate (N)				
Boron					Nitrite (N)				
Chloride					Ammonia (N)				
Chlorine: Res.					Organic (N)				
Demand					T Kjeldahl (N)				
Color					Odor				
Conductivity					Oil & Grease				
Cyanide: Total					Oxygen Demand: BOD ₅				
Amenable					COD				
Free					Oxygen Dissolved				
Fluoride					pH				
Hardness: T (CaCO ₃)					Phenols				
Ca (CaCO ₃)					Phosphorus: Total (P)				
Mg (CaCO ₃)					Ortho (P)				
MBAS					Poly (P)				
Metals: Aluminum					Residue: Total				
Arsenic ppm	<0.01				Total Vol				
Cadmium ppm	0.01				Suspended				
Calcium					Vol Suspended				
Chromium: Total ppm	0.02				Settleable				
Hexavalent					Silica				
Trivalent					Sulfide				
Cobalt					Sulfite				
Copper					Sulfate				
Iron					TOC				
Lead ppm	0.05				Turbidity (JTU)				
Manganese					Barium ppm	0.10			
Magnesium					Silver ppm	<0.01			

Sampling Method: By Client X By WMI _____ Auto Sampler _____ Other _____

Water Management, Inc.

2480 Broad / Avenue
Cleveland, Ohio 44115

Phone: (216) 566-8090

ANALYSIS CERTIFIED BY: J. HOWARD SANDERS

Director

Date: 10-18-84

Client

MANSFIELD PRODUCTS
246 EAST FOURTH STREET
MANSFIELD, OHIO 44902

ATTN: BILL WOOD

P.O. No. 703074

W.O. No. Special 199

Sample Recd: 10-12-84

Sample No. See Below

Phone: _____

Source/Comments #1-Composite of ground coal enamel, finish coat enamel and iron from nickel filter.

#2-WT Sludge that goes to landfill

Analysis performed in accordance with CFR40-261 Appendix II for E.P. Toxicity Characteristics.

ANALYSIS: Metal results in (ug/1) ppb, all other results in (mg/1) ppm, unless otherwise noted.

	1	2	3	4		1	2	3	4
Acidity - T (CaCO ₃)					Mercury ppm	<0.05	<0.05		
Free (MO) (CaCO ₃)					Nickel ppm	75	16	(W Wad)	
Alkalinity - T (CaCO ₃)					Potassium				
phth (CaCO ₃)					Selenium ppm	<0.02	<0.02		
Bact: T. Coli COL/100 ml					Sodium				
Fecal Coli COL/100 ml					Tin				
T Plate COL/100ml					Zinc				
Bromide					Nitrogen: Nitrate (N)				
Boron					Nitrite (N)				
Chloride					Ammonia (N)				
Chlorine: Res.					Organic (N)				
Demand					T Kjeldahl (N)				
Color					Odor				
Conductivity					Oil & Grease				
Cyanide: Total					Oxygen Demand: BOD ₅				
Amenable					COD				
Free					Oxygen Dissolved				
Fluoride					pH	5.2	8.4		
Hardness: T (CaCO ₃)					Phenols				
Ca (CaCO ₃)					Phosphorus: Total (P)				
Mg (CaCO ₃)					Ortho (P)				
MBAS					Poly (P)				
Metals: Aluminum					Residue: Total				
Arsenic ppm	<0.01	<0.01			Total Vol				
Cadmium ppm	0.02	0.01			Suspended				
Calcium					Vol Suspended				
Chromium: Total ppm	<0.01	0.01			Settleable				
Hexavalent					Silica				
Trivalent					Sulfide				
Cobalt					Sulfite				
Copper					Sulfate				
Iron					TOC				
Lead ppm	0.05	0.08			Turbidity (JTU)				
Manganese					Silver ppm	0.01	<0.01		
Magnesium					Barium ppm	0.06	2.22		

Sampling Method: By Client XX By WMI _____ Auto Sampler _____ Other _____

mpc MANSFIELD PRODUCTS COMPANY

*file # H.W.
a Richard Co.*

March 5, 1986

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Ben Chambers, Supervisor
Div. Solid & Hazardous Waste Management
OHIO ENVIRONMENTAL PROTECTION AGENCY
Northwest District Office
1035 Devlac Grove Drive
Bowling Green, OH 43402

SUBJECT: ENAMEL FLOOR SWEEPINGS (ENAMEL DUST)
REF.: YOUR LETTER 5/29/85

Dear Mr. Chambers:

Attached is the EP-Toxicity Test for a composite enamel floor sweepings sample February 19, 1986.

The parameters are within U.S. EPA limits, and the material is non-hazardous.

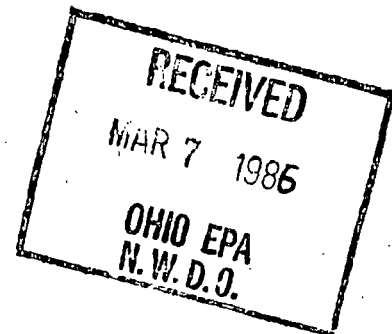
Very truly yours,

MANSFIELD PRODUCTS COMPANY

W. A. Wood

W. A. Wood, Supervisor
Plant Engineering

cc: WCI-Cleveland - D. Marques
cc: MPC - F. Ade



Ohio EPA

Re: Mansfield Products Company
Richland County
Hazardous Waste

Mr. W. A. Wood, Supervisor
Plant Engineering
Mansfield Products Company
246 East Fourth Street
Mansfield, Ohio 44902

May 29, 1985

Dear Mr. Wood:

We have evaluated the material you submitted in November, 1984, on the waste enamel dust (sweepings). I apologize for the slow response to your inquiry and certainly appreciate your cooperative attitude.

The extraction procedure toxicity data would indicate that the floor sweepings from the enameling operations are non-hazardous. If the material continues to be dry floor sweepings, disposal in a sanitary landfill would be satisfactory.

However, the nickel concentrations do present a concern for this waste and the delisted (8-6-81, FR40158) wastewater treatment sludge. Please note that U.S. EPA is re-evaluating acceptable concentrations of nickel in waste materials and may issue guidance on this soon. We may need to review the status of these wastes at a later date, also.

To assure that we have good data to base any future nickel decision on and to clarify the quality of the floor sweepings, we are requesting that your company perform quarterly sampling and analysis of the sweepings for a period of one year. We do not believe, based on the results shown to date, that the complete EP toxicity parameters need to be evaluated. We would suggest that the composite material be analyzed for nickel, cadmium, barium, lead and chromium. Please submit the results of the analyses by July 1 and October, 1985 and January 1 and April 1, 1986.

Please contact me or Paul Kalter if you have any questions.

Yours truly,



Bennett G. Chambers, P.E.
Division of Solid & Hazardous Waste Mgt.

BGC/1st

cc: G. Jones, Richland County Landfill

cc: P. Cotter, DSHWM

cc: A & C Rep

File



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

CRL Receipt Date 10/17/90 FIT Receipt Date 11/20/90 Review Completed 12/05/90

TO: L. Lyeck
FROM: C. Koning
SUBJECT: Mansfield Plumbing Products
PAN: OH05325A (1 hour charged for review) Case # 14960

Sample Description

Organics (VOA, ABN, Pest/PCB)

Low Soil
 Low Water
 Drinking Water
 Other

Inorganics (Metals, Cyanide)

9 Low Soil
 Low Water
 Drinking Water
 Other

Project Data Status Completed!!

 X Incomplete, awaiting Org Soils

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

 ✓ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. Date Sampled 9/25/90

0759:2



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

CRL Receipt Date 11/5/90 FIT Receipt Date 1/2/91 Review Completed 1/3/91

TO: L. Lueck.

FROM: C. Kauris

SUBJECT: Mansfield Products

PAN: 0405325A (1 hour charged for review)

Case # 14960

Sample Description

Organics (VOA, ABN, Pest/PCB)

9 Low Soil

_____ Low Water

_____ Drinking Water

_____ Other

Inorganics (Metals, Cyanide)

_____ Low Soil

_____ Low Water

_____ Drinking Water

_____ Other

Project Data Status X Completed!!

_____ Incomplete, awaiting _____

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

✓ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9

Page No. _____

Date Sampled 9/25/90

0759:2

11/20

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 11-16-90

SUBJECT: Review of Region V CLP Data
Received for Review on Oct-17-1990

FROM: Curtis Ross, Director (SSCRL)
Central Regional Laboratory J. Turner

TO: Data User: Sit

We have reviewed the data for the following case(s).

SITE NAME: Mansfield products (OH) SMO Case No. 141960

EPA Data Set No. _____ No. of Samples: 9 D.U./Activity Numbers 1

CRL No. _____

SMO Traffic No. MEHA 35-43

CLP Laboratory: Skinner Hrs. Required for Review: 6

Following are our findings.

7 1/2 AX 11-14-90

See next page
MF 11/13/90

- ☐ Data are acceptable for use.
- ☒ Data are acceptable for use with qualifications noted above.
- ☐ Data are preliminary - pending verification by Contractor Laboratory.
- ☐ Data are unacceptable.

cc: Dr. Alfred Haebeler/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

CASE:14960 LAB:SKINNER SOILS: MEHA35-43 SITE: MANSFIELD PRODUCTS

Below are the out of control audits for case 14960 which contains 9 low level soil samples analyzed for total metal and total cyanide.

The lab resubmitted form 6 and 10 which were placed into the data package. The reviewer corrected form 5 for control limits.

ICP ANALYSES: The matrix spike of Sb(22.9%), Cr(53.4%), and Cu(54%) are out of control.

The duplicate audit of Cu(35%) and Cr(34.7%) were flagged(*) by the lab however the technical criteria for soils(35% RPD) was not exceeded for Cr therefore Cr data are not qualified on this basis. The lab did not flag the duplicate audit of Sb(200%) since the technical criteria for soils($\pm 2 \times \text{CRDL}$) was not exceeded therefore all Sb data are not qualified on this basis.

For Sb: MEHA38,39 are unusable(R); the rest of the data are estimated(J) due to a low bias. All Cr data are estimated(J) due to a low bias. All Cu data are estimated(J) due to poor precision and a low bias.

The ICP serial dilution of Zn(17.9%) indicates interference and all Zn data are estimated(J).

The lab did not flag(N) on the matrix spike of Mn(14.5%) since the sample result was $4 \times$ the spike added therefore all Mn data are acceptable.

The duplicate audit of Mg(45.9%) was flagged(*) by the lab however the technical criteria for soils($\pm 2 \times \text{CRDL}$) was not exceeded therefore all Mg data are acceptable.

The duplicate audit of Ca(84.5%) indicates poor precision and all Ca data are estimated(J).

The prep blank of Na(16.8 mg/kg) and the CCB of Co(5.4 ug/l) indicate contamination. Na(MEHA35) and Co(MEHA36) are estimated(J) due to contamination.

GFAA ANALYSES: The matrix spike of As(74.1%) is out of control. All As data are estimated(J) due to a low bias.

The lab flagged(W) on Tl(MEHA42) indicating interference and the data result is estimated(UJ).

OTHER QUALIFIERS: All CN and Hg data are acceptable.

Reviewed by: M. Fletcher

Date: 11/13/90

QC EXCEPTION SUMMARY REPORT

CASE # 14960
DATA SET
LAB Q.C. #
DATE: 11/13/50

SITE Mansfield products (OH)
LAB Silicones
REVIEWED BY m. J. J. J.

MATRIX: Seed
 CONC. : 102
 MATRIX: _____
 CONC. : _____

WATER SAMPLE SPK. _____
WATER SAMPLE DUP. _____
SOIL SAMPLE SPK. _____
SOIL SAMPLE DUP. _____

[illegible]

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 14960 LABORATORY Skinner
 EDG NO. MEHA35 DATA USER FT
 SOW 7/84 REVIEW COMPLETION DATE 11/13/90
 NO. OF SAMPLES _____ WATER 9 SOIL _____ OTHER _____
 REVIEWER ☐ ESD ☒ ESAT ☐ OTHER, CONTRACT/CONTRACTOR _____

	ICP	AA	Hg	CYANIDE
1. HOLDING TIMES	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
2. INITIAL CALIBRATIONS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
3. CONTINUING CALIBRATIONS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
4. FIELD BLANKS ("F" = not applicable)	<u>✓</u>	<u>0</u>	<u>0</u>	<u>0</u>
5. LABORATORY BLANKS	<u>X</u>	<u>0</u>	<u>0</u>	<u>0</u>
6. ICS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
7. LCS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
8. DUPLICATE ANALYSIS	<u>M</u>	<u>✓</u>	<u>0</u>	<u>0</u>
9. MATRIX SPIKE	<u>M</u>	<u>M</u>	<u>0</u>	<u>0</u>
10. MSA	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
11. SERIAL DILUTION	<u>X</u>	<u>0</u>	<u>0</u>	<u>0</u>
12. SAMPLE VERIFICATION	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
13. REGIONAL QC ("F" = not applicable)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
14. OVERALL ASSESSMENT	<u>M</u>	<u>M</u>	<u>✓</u>	<u>✓</u>

0 = No problems or minor problems that do not affect data usability.

X = No more than about 5% of the data points are qualified as either estimated or unusable.

M = More than about 5% of the data points are qualified as estimated.

Z = More than about 5% of the data points are qualified as unusable.

DPO ACTION ITEMS: _____

AREAS OF CONCERN: _____

U.S. EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

SOW No.: 7/88

EPA Sample No.

MEHA35
MEHA35D
MEHA35S
MEHA36
MEHA37
MEHA38
MEHA39
MEHA40
MEHA41
MEHA42
MEHA43

Lab Sample ID

09392-01S
09392-01S2
09392-01DS
09392-02S
09392-03S
09392-04S
09392-05S
09392-06S
09392-07S
09392-08S
09392-09S

RECEIVED
OCT 1 1990
EPA CENTRAL REGIONAL LAB.
535 S. CLARK ST.
CHICAGO, ILLINOIS 60605

Were ICP interelement corrections applied?

Yes/No YES

Were ICP background corrections applied?

Yes/No YES

If yes-were raw data generated before
application of background corrections?

Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:

Name: Richard P. Purdy

Date:

Title: CLP Program Manager

COVER PAGE - IN

Rev.6/89

000001

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA35

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-01S

Level (low/med): LOW

Date Received: 09/26/90

% Solids: 79.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8410.00			P
7440-36-0	Antimony	5.60	B	N	P
7440-38-2	Arsenic	16.20		N	F
7440-39-3	Barium	68.60			P
7440-41-7	Beryllium	0.77	B		P
7440-41-7	Cadmium	0.48	U		P
7440-70-2	Calcium	24400.00		*	P
7440-47-3	Chromium	42.50		N*	P
7440-48-4	Cobalt	8.60	B		P
7440-50-8	Copper	59.40		N*	P
7439-89-6	Iron	23500.00			P
7439-92-1	Lead	45.80			P
7439-95-4	Magnesium	6190.00		*	P
7439-96-5	Manganese	554.00			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	28.40			P
7440-09-7	Potassium	1200.00	B		P
7782-49-2	Selenium	0.74	U		F
7440-22-4	Silver	0.96	U		P
7440-23-5	Sodium	75.70	B		P
7440-28-0	Thallium	0.50	U		F
7440-62-2	Vanadium	17.40			P
7440-66-6	Zinc	144.00		E	P
	Cyanide	1.30	U		AS

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: BROWN

Clarity After:

Artifacts:

Comments:

000002

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA36

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-02S

Level (low/med): LOW

Date Received: 09/26/90

% Solids: 85.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3060.00			P
7440-36-0	Antimony	2.50	B	N	P
7440-38-2	Arsenic	26.10		N	F
7440-39-3	Barium	24.40	B		P
7440-41-7	Beryllium	0.22	U		P
7440-41-7	Cadmium	0.44	U		P
7440-70-2	Calcium	60200.00		*	P
7440-47-3	Chromium	103.00		N*	P
7440-48-4	Cobalt	5.10	B		P
7440-50-8	Copper	79.60		N*	P
7439-89-6	Iron	33200.00			P
7439-92-1	Lead	30.50			P
7439-95-4	Magnesium	24800.00		*	P
7439-96-5	Manganese	972.00			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	23.10			P
7440-09-7	Potassium	412.00	B		P
7782-49-2	Selenium	0.69	U		F
7440-22-4	Silver	0.88	U		P
7440-23-5	Sodium	128.00	B		P
7440-28-0	Thallium	0.46	U		F
7440-62-2	Vanadium	10.50	B		P
7440-66-6	Zinc	150.00		E	P
	Cyanide	1.20	U		AS

Color Before: BROWN

Clarity Before:

Texture: COARSE

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

STONES

000003

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA37

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-035

Level (low/med): LOW

Date Received: 09/26/90

% Solids: 83.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3670.00			P
7440-36-0	Antimony	3.30	B	N	P
7440-38-2	Arsenic	10.10		N	F
7440-39-3	Barium	46.00			P
7440-41-7	Beryllium	0.72	B		P
7440-41-7	Cadmium	0.45	U		P
7440-70-2	Calcium	42200.00		*	P
7440-47-3	Chromium	49.60		N*	P
7440-48-4	Cobalt	6.00	B		P
7440-50-8	Copper	414.00		N*	P
7439-89-6	Iron	29200.00			P
7439-92-1	Lead	42.20			P
7439-95-4	Magnesium	10700.00		*	P
7439-96-5	Manganese	669.00			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	23.80			P
7440-09-7	Potassium	534.00	B		P
7782-49-2	Selenium	0.67	U		F
7440-22-4	Silver	0.90	U		P
7440-23-5	Sodium	109.00	B		P
7440-28-0	Thallium	0.45	U		F
7440-62-2	Vanadium	7.70	B		P
7440-66-6	Zinc	135.00		E	P
	Cyanide	1.20	U		AS

Color Before: BROWN

Clarity Before:

Texture: COARSE

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

STONES

000004

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA38

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Matrix (soil/water): SOIL Lab Sample ID: 09392-04S

Level (low/med): LOW Date Received: 09/26/90

% Solids: 73.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2840.00			P
7440-36-0	Antimony	2.70	U	N	P
7440-38-2	Arsenic	9.70		N	F
7440-39-3	Barium	45.30	B		P
7440-41-7	Beryllium	0.61	B		P
7440-41-7	Cadmium	0.53	U		P
7440-70-2	Calcium	13800.00		*	P
7440-47-3	Chromium	31.30		N*	P
7440-48-4	Cobalt	6.00	B		P
7440-50-8	Copper	76.40		N*	P
7439-89-6	Iron	14600.00			P
7439-92-1	Lead	58.20			P
7439-95-4	Magnesium	3270.00		*	P
7439-96-5	Manganese	333.00			P
7439-97-6	Mercury	0.14			CV
7440-02-0	Nickel	19.60			P
7440-09-7	Potassium	403.00	B		P
7782-49-2	Selenium	0.82	U		F
7440-22-4	Silver	1.10	U		P
7440-23-5	Sodium	107.00	B		P
7440-28-0	Thallium	0.54	U		F
7440-62-2	Vanadium	6.70	B		P
7440-66-6	Zinc	131.00		E	P
	Cyanide	1.40	U		AS

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

ROOTS AND LEAVES

000005

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA39

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-055

Level (low/med): LOW

Date Received: 09/26/90

% Solids: 80.6

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2540.00			P
7440-36-0	Antimony	2.40	U	N	P
7440-38-2	Arsenic	10.80		N	F
7440-39-3	Barium	23.40	B		P
7440-41-7	Beryllium	0.66	B		P
7440-41-7	Cadmium	0.49	U		P
7440-70-2	Calcium	23100.00		*	P
7440-47-3	Chromium	35.90		N*	P
7440-48-4	Cobalt	5.00	B		P
7440-50-8	Copper	35.70		N*	P
7439-89-6	Iron	17000.00			P
7439-92-1	Lead	35.10			P
7439-95-4	Magnesium	5570.00		*	P
7439-96-5	Manganese	463.00			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	12.50			P
7440-09-7	Potassium	460.00	B		P
7782-49-2	Selenium	0.72	U		F
7440-22-4	Silver	0.97	U		P
7440-23-5	Sodium	92.90	B		P
7440-28-0	Thallium	0.48	U		F
7440-62-2	Vanadium	7.00	B		P
7440-66-6	Zinc	104.00		E	P
	Cyanide	1.20	U		AS

Color Before: BROWN

Clarity Before:

Texture: MEDIUM

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

STONES

000006

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA40

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-06S

Level (low/med): LOW

Date Received: 09/26/90

% Solids:

80.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4340.00			P
7440-36-0	Antimony	17.70	N		P
7440-38-2	Arsenic	39.80	N		F
7440-39-3	Barium	1310.00			P
7440-41-7	Beryllium	1.00	B		P
7440-41-7	Cadmium	2.10			P
7440-70-2	Calcium	16000.00	*		P
7440-47-3	Chromium	322.00	N*		P
7440-48-4	Cobalt	124.00			P
7440-50-8	Copper	180.00	N*		P
7439-89-6	Iron	33700.00			P
7439-92-1	Lead	522.00			P
7439-95-4	Magnesium	3280.00	*		P
7439-96-5	Manganese	683.00			P
7439-97-6	Mercury	0.38			CV
7440-02-0	Nickel	1680.00			P
7440-09-7	Potassium	1130.00	B		P
7782-49-2	Selenium	0.72	U		F
7440-22-4	Silver	1.10	B		P
7440-23-5	Sodium	695.00	B		P
7440-28-0	Thallium	0.48	U		F
7440-62-2	Vanadium	9.60	B		P
7440-66-6	Zinc	662.00	E		P
	Cyanide	7.70			AS

Color Before: BROWN

Clarity Before:

Texture: MEDIUM

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

STONES

600007

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA41

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-07S

Level (low/med): LOW

Date Received: 09/26/90

% Solids: 92.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7240.00			P
7440-36-0	Antimony	7.60	B	N	P
7440-38-2	Arsenic	18.30		N	F
7440-39-3	Barium	190.00			P
7440-41-7	Beryllium	0.56	B		P
7440-41-7	Cadmium	0.41	U		P
7440-70-2	Calcium	14100.00		*	P
7440-47-3	Chromium	54.40		N*	P
7440-48-4	Cobalt	18.20			P
7440-50-8	Copper	212.00		N*	P
7439-89-6	Iron	27100.00			P
7439-92-1	Lead	250.00			P
7439-95-4	Magnesium	5440.00		*	P
7439-96-5	Manganese	561.00			P
7439-97-6	Mercury	0.29			CV
7440-02-0	Nickel	74.00			P
7440-09-7	Potassium	1500.00			P
7782-49-2	Selenium	0.62	U		F
7440-22-4	Silver	0.82	U		P
7440-23-5	Sodium	226.00	B		P
7440-28-0	Thallium	0.41	U		F
7440-62-2	Vanadium	15.60			P
7440-66-6	Zinc	486.00		E	P
	Cyanide	1.10	U		AS

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

ROOTS AND STONES

000008

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA42

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-08S

Level (low/med): LOW

Date Received: 09/26/90

% Solids: 88.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9970.00			P
7440-36-0	Antimony	46.20	N		P
7440-38-2	Arsenic	26.40	N		F
7440-39-3	Barium	844.00			P
7440-41-7	Beryllium	0.60	B		P
7440-41-7	Cadmium	0.44	U		P
7440-70-2	Calcium	77900.00	*		P
7440-47-3	Chromium	679.00	N*		P
7440-48-4	Cobalt	81.40			P
7440-50-8	Copper	125.00	N*		P
7439-89-6	Iron	39400.00			P
7439-92-1	Lead	468.00			P
7439-95-4	Magnesium	17900.00	*		P
7439-96-5	Manganese	5450.00			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	206.00			P
7440-09-7	Potassium	1380.00			P
7782-49-2	Selenium	0.64	U		F
7440-22-4	Silver	71.50	B		P
7440-23-5	Sodium	2040.00			P
7440-28-0	Thallium	0.43	U	W	F
7440-62-2	Vanadium	45.30			P
7440-66-6	Zinc	811.00	E		P
	Cyanide	1.10	U		AS

Color Before: BROWN

Clarity Before:

Texture: MEDIUM

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

ROOTS AND STONES

000009

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA43

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-09S

Level (low/med): LOW

Date Received: 09/26/90

% Solids: 78.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6800.00			P
7440-36-0	Antimony	32.90	N		P
7440-38-2	Arsenic	19.50	N		F
7440-39-3	Barium	671.00			P
7440-41-7	Beryllium	0.80	B		P
7440-41-7	Cadmium	0.50	U		P
7440-70-2	Calcium	8110.00	*		P
7440-47-3	Chromium	38.90	N*		P
7440-48-4	Cobalt	65.20			P
7440-50-8	Copper	229.00	N*		P
7439-89-6	Iron	27300.00			P
7439-92-1	Lead	926.00			P
7439-95-4	Magnesium	2870.00	*		P
7439-96-5	Manganese	994.00			P
7439-97-6	Mercury	0.28			CV
7440-02-0	Nickel	123.00			P
7440-09-7	Potassium	1090.00	B		P
7782-49-2	Selenium	0.75	U		F
7440-22-4	Silver	1.20	B		P
7440-23-5	Sodium	645.00	B		P
7440-28-0	Thallium	0.50	U		F
7440-62-2	Vanadium	15.10			P
7440-66-6	Zinc	1030.00	E		P
	Cyanide	1.30	U		AS

Color Before: BROWN

Clarity Before:

Texture: MEDIUM

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

ROOTS AND STONES

000010

U.S. EPA - CLP

3
BLANKS

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank	C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank	C	M
	(ug/L)		1	C	2	C	3	C			
Aluminum	29.0	U	29.0	U	29.0	U	29.0	U	5.800	U	P
Antimony	10.0	U	-22.7	B	10.0	U	-27.2	B	2.000	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	F
Barium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cadmium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Calcium	54.0	U	54.0	U	54.0	U	54.0	U	10.800	U	P
Chromium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Cobalt	4.0	U	5.4	B	4.0	U	4.0	U	0.800	U	P
Copper	5.0	B	5.7	B	5.7	B	-5.0	B	0.600	U	P
Iron	-21.1	B	12.0	U	43.5	B	47.3	B	2.400	U	P
Lead	16.0	U	16.0	U	16.0	U	16.0	U	3.200	U	P
Magnesium	37.0	U	37.0	U	37.0	U	37.0	U	7.400	U	P
Manganese	7.0	U	7.0	U	7.0	U	7.0	U	1.400	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.100	U	CV
Nickel	5.0	U	8.9	B	5.0	U	5.0	U	1.000	U	P
Potassium	780.0	U	780.0	U	780.0	U	780.0	U	156.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	F
Silver	4.0	U	4.0	U	4.0	U	4.0	U	0.800	U	P
Sodium	37.0	U	37.0	U	37.0	U	37.0	U	16.800	B	P
Thallium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	F
Vanadium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Zinc	16.5	B	3.6	B	3.6	B	2.0	U	0.400	U	P
Cyanide	20.0	U	20.0	U	20.0	U	20.0	U	1.000	U	AS

000018

U.S. EPA - CLP

3
BLANKS

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Aluminum			29.0	U							P
Antimony			-45.4	B							P
Arsenic			3.0	U	3.0	U	3.0	U			F
Barium			2.0	U							P
Beryllium			1.0	U							P
Cadmium			2.0	U							P
Calcium			54.0	U							P
Chromium			5.0	U							P
Cobalt			4.0	U							P
Copper			-5.7	B							P
Iron			12.0	U							P
Lead			16.0	U							P
Magnesium			37.0	U							P
Manganese			7.0	U							P
Mercury			0.2	U	0.2	U	0.2	U			CV
Nickel			5.0	U							P
Potassium			780.0	U							P
Selenium			3.0	U							F
Silver			4.0	U							P
Sodium			37.0	U							P
Thallium			2.0	U							F
Vanadium			3.0	U							P
Zinc			-9.2	B							P
Cyanide			20.0	U	20.0	U	20.0	U			AS

000019

U.S. EPA - CLP

3
BLANKS

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Aluminum											NR
Antimony											NR
Arsenic	3.0	U	3.0	U	3.0	U					F
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury			0.2	U	0.2	U	0.2	U			CV
Nickel											NR
Potassium											NR
Selenium	3.0	U	3.0	U	3.0	U	3.0	U			F
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide			20.0	U							AS

000020

U.S. EPA - CLP

3
BLANKS

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury			0.2	U							CV
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

000021

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

MEHA35S

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Matrix: SOIL

Level (low/med): LOW

% Solids for Sample: 79.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	33.8848		5.6463	B	125.31	22.5	N	P
Antimony	75-125	23.5915		16.1642		10.03	74.1	N	F
Arsenic	75-125	550.1263		68.5777		501.25	96.1		P
Barium	75-125	12.7920		0.7687	B	12.53	96.0		P
Beryllium	75-125	11.2757		0.4820	U	12.53	90.0		P
Cadmium	75-125	69.2858		42.5342		50.13	53.4	N	P
Calcium	75-125	130.9075		8.5526	B	125.31	97.6		P
Chromium	75-125	93.2483		59.4322		62.66	54.0	N	P
Cobalt	75-125	154.9827		45.7899		125.31	87.1		P
Copper	75-125	572.0561		553.9086		125.31	14.5		P
Iron	75-125	0.6152		0.1139	U	0.57	107.9		CV
Lead	75-125	148.8574		28.3859		125.31	96.1		P
Magnesium	75-125	2.2669		0.7444	U	2.51	90.3		F
Manganese	75-125	11.8396		0.9639	U	12.53	94.5		P
Mercury	75-125	11.9161		0.4963	U	12.53	95.1		F
Nickel	75-125	135.9852		17.3703		125.31	94.7		P
Potassium	75-125	240.4290		144.4452		125.31	76.6		P
Selenium	75-125	6.2419		1.2506	U	6.17	101.2		AS
Silver	75-125								
Sodium	75-125								
Thallium	75-125								
Vanadium	75-125								
Zinc	75-125								
Cyanide	75-125								

Comments:

000023

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

MEHA35A

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

Matrix: SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony		117.37		23.43	B	120.0	78.3		P
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		522.85		176.50		350.0	99.0		P
Cobalt									NR
Copper		765.08		246.62		500.0	103.7		P
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEHA35D

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 79.8 % Solids for Duplicate: 80.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Aluminum		8413.3381	8725.4163	3.6		P
Antimony		5.6463 B	2.4099 U	200.0		P
Arsenic		16.1642	18.6972	14.5		F
Barium	48.2	68.5777	73.2359	6.6		P
Beryllium		0.7687 B	0.6579 B	15.5		P
Cadmium		0.4820 U	0.4820 U			P
Calcium		24354.1462	9886.2507	84.5	*	P
Chromium		42.5342	29.9547	34.7	*	P
Cobalt		8.5526 B	10.3142 B	18.7		P
Copper		59.4322	41.7124	35.0	*	P
Iron		23511.6557	24477.0496	4.0		P
Lead		45.7899	42.9897	6.3		P
Magnesium	1204.9	6193.3659	3882.5416	45.9	*	P
Manganese		553.9086	453.2002	20.0		P
Mercury		0.1139 U	0.1139 U			CV
Nickel	9.6	28.3859	29.8173	4.9		P
Potassium		1196.9342 B	1195.8980 B	0.1		P
Selenium		0.7444 U	0.6962 U			F
Silver		0.9639 U	0.9639 U			P
Sodium		75.6771 B	70.9225 B	6.5		P
Thallium		0.4963 U	0.4641 U			F
Vanadium	12.0	17.3703	16.4450	5.5		P
Zinc		144.4452	117.7221	20.4		P
Cyanide		1.2506 U	1.2358 U			AS

000025

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

ICP ID Number:

P1

Date: 07/15/90

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200	29.0	P
Antimony	206.80		60	10.0	P
Arsenic			10		
Barium	493.40		200	2.0	P
Beryllium	313.00		5	1.0	P
Cadmium	226.50		5	2.0	P
Calcium	317.90		5000	54.0	P
Chromium	267.70		10	5.0	P
Cobalt	228.60		50	4.0	P
Copper	324.70		25	3.0	P
Iron	259.90		100	12.0	P
Lead	220.30		3	16.0	P
Magnesium	279.00		5000	37.0	P
Manganese	257.60		15	7.0	P
Mercury			0.2		
Nickel	231.60		40	5.0	P
Potassium	766.40		5000	780.0	P
Selenium			5		
Silver	328.00		10	4.0	P
Sodium	588.90		5000	37.0	P
Thallium			10		
Vanadium	292.40		50	3.0	P
Zinc	213.80		20	2.0	P

Comments:

P1: THERMO JARRELL-ASH ICAP61 (#10782)

000029

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

ICP ID Number:

Date: ~~10/15/98~~
02/15/00

Flame AA ID Number:

Furnace AA ID Number: F1

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	197.20	BS	200	3.0 2.0 F LOF 1029/90	
Antimony			60		
Arsenic			10		
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron			100		
Lead			3		
Magnesium			5000		
Manganese			15		
Mercury			0.2		
Nickel			40		
Potassium			5000		
Selenium	196.00	BS	5	3.0 F	
Silver			10		
Sodium			5000		
Thallium			10		
Vanadium			50		
Zinc			20		

Comments:

F1: THERMO JARRELL-ASH VIDEO 22E (#2486)

000030

Instrument Detection Limits (Quarterly)

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINNER Case No.: 14960 SAS No.: SDG No.: MEHA35

ICP ID Number:

Date: 10/15/90

Flame AA ID Number:

Furnace AA ID Number: F3

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	200				
Antimony	60				
Arsenic	10				
Barium	200				
Beryllium	5				
Cadmium	5				
Calcium	5000				
Chromium	10				
Cobalt	50				
Copper	25				
Iron	100				
Lead	3				
Magnesium	5000				
Manganese	15				
Mercury	0.2				
Nickel	40				
Potassium	5000				
Selenium	5				
Silver	10				
Sodium	5000				
Thallium	10				
Vanadium	50				
Zinc	20				

Comments:

F3: THERMO JARRELL-ASH VIDEO 22E (#2913)

0000031

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER

Case No.: 14960

SAS No.:

SDG No.: MEHA35

ICP ID Number:

Date: ~~07/15/90~~

10/15/90

Flame AA ID Number: M2

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		
Antimony			60		
Arsenic			10		
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron			100		
Lead			3		
Magnesium			5000		
Manganese			15		
Mercury	253.60		0.2	0.2	CV
Nickel			40		
Potassium			5000		
Selenium			5		
Silver			10		
Sodium			5000		
Thallium			10		
Vanadium			50		
Zinc			20		

Comments:

M2: SPECTRO PRODUCTS HG-4 (#4707)

000032

CORRECTED NARRATIVE

page 1 of 9

-PJC
1/14/91

2.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

DATE 12/24/90

SUBJECT: Review of Region V CLP Data
Received for Review on NOVEMBER 5, 1990

FROM: Curtis Ross, Director (ESCR) *Patricia J. Chivilla for*
Central Regional Laboratory

TO: Data User: FIT

We have reviewed the data for the following case(s).

SITE NAME: MANSFIELD PRODUCTS (OH) SMO Case No. 14960
EPA Data Set No. No. of Samples: 9 D.U./Activity Numbers 1
CRL No.

SMO Traffic No. EHQ42-50

CLP Laboratory: ENCOTEC

Hrs. Required for Review: 15 + 2 = 17 *weeks*

Following are our findings.

The laboratory received nine (9) soil samples for VOA, SVOA and pesticide/PCB analysis on 9-26-90. These samples were received in good condition.

~~Sample EH047 is the duplicate of EH043.~~ *W. Ira Wilson*
~~Sample EH050 is the duplicate of EH049.~~ *1/11/91*

A large number of TICs were present in the SVOA fraction ~~(all samples)~~ *um 12-19*:
EHQ42(14), EHQ45(20), EHQ47(20), EHQ48(20), EH049(17), EH050(20).

A large number of SVOA calibration outliers ~~were~~ *was* noted.

Every pesticide sample except EH042 needed to be diluted.

st/ra Samples EH043, 44, 45, 46 ~~contained~~ *reported* Aroclor 1242

PCB samples EH047 and 48 ~~contained~~ *reported* Aroclor 1260. EH048 also reported Heptochlor Epoxide.
um 12-19-90

The reviewers narrative is noted in the following pages

- () Data are acceptable for use.
- ☒ Data are acceptable for use with qualifications noted above.
- () Data are preliminary - pending verification by Contractor Laboratory.
- () Data are unacceptable.

Walter McLaughlin
ESAT/Weston
12/21/90

cc: Dr. Alfred Haebeler/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

Narrative

1.) **Holding Time**

Water and soil was sampled on the 25th of September, 1990. The laboratory received nine (9) soil samples on the 26th of September, 1990, in good condition.

All VOA soil samples exceeded VOA soil holding times of seven (7) days by three (3) days.

Positive results for these samples are flagged as estimated (J) and any non-detects are flagged with the quantitation limits as estimated (UJ).

All SVOA soil samples met the proper holding time criteria.

All Pesticide soil samples met the proper holding time criteria.

2a.) **GC/MS Tuning**

GC/MS tunings complied with the mass list and ion abundance criteria for both BFB and DFTPP.

2b.) **GC Instrument Performance**

Retention times (RT's) for DDT were greater than (>) 12 minutes using packed columns. This meets acceptable GC packed column criteria.

Some Pesticide standards had to be repeated due to unacceptable retention time shifts. Upon reanalysis, the standards met proper retention time shift criteria.

Chlordane was not included in the pesticide/PCB analytical sequence.

3.) **Calibration**

The initial and continuing calibrations of the VOA and SVOA fraction were evaluated for the target compound list (TCL) and any outliers were recorded on the outlier forms included with this narrative.

A linearity check of the pesticide standards based on the calibration factor (CF) of evaluation mix A, B and C was performed. It was acceptable.

4.) **Method Blanks**

VBlk1 is the low level VOA soil blank.

VBlk1 reported Trichloroethene, Toluene and no VOA TICs.

Toluene and Trichloroethene are laboratory contaminants. The presence of these compounds in any of the associated samples is flagged as non-detect (U) when the sample results are less than (<) 5x the blank result. The VOA blank summary (Form 4) lists the associated samples.

SBlk1 and SBlk2 are low level SVOA soil blanks.

SBlk1 and SBlk2 did not report any TCL compounds or SVOA TIC's.

PBlkL1 and PBlkL2 are the low level pesticide soil blanks. There were no TCL compounds reported.

5.) **Surrogate Recoveries**

All soil VOA surrogate recoveries were acceptable.

All soil SVOA surrogate recoveries were acceptable.

Soil pesticide surrogate dibutylchlorendate was out of control in samples EHQ47 (250%), EHG47DL (211%), EHQ48 (231%), EHQ48DL (229%), EHQ49 (517%), and EHQ49MS (151%). Any positive pesticide results in these samples are flagged as estimated (J) and any non-detect is flagged with the quantitation limit as estimated (UJ).

All other pesticide surrogate recoveries were acceptable.

6.) **Matrix Spike and Matrix Spike Duplicate (MS/MSD)**

Sample EHQ45 was used as the low level soil matrix spike for VOA, SVOA and Pesticide samples.

Soil VOA spike 1,1-Dichloroethene (RPD29%) is out of control. Therefore, any positive result for this compound is flagged as estimated (J) and any non-detect is flagged with the quantitation limit estimated (UJ) in the unspiked sample (EHQ45).

Soil SVOA spike 4-Nitrophenol (MSD117%) is out of control. Therefore, any positive result for this compound is flagged as estimated (J) and any non-detect is flagged with the quantitation limit estimated (UJ) in the unspiked sample (EHQ45).

All soil Pesticide spikes met proper QC criteria.

7.) Field Blanks and Duplicates

There were no field blanks associated with this dataset.

~~There were no sample duplicates associated with this data set.~~

W. L. Wilson
1/11/41

~~Sample EH047 is the soil duplicate of EH043.~~

~~Disregard information reported below.~~

~~Sample EH043 reported no VOA TCLs and 1 VOA TIC; SVOAs Phenanthrene (990), Anthracene (190), Fluoranthene (1300), Pyrene (790), Benzo(a)Anthracene (490), Bis(2-ethylhexyl)Phthalate (230), Chrysene (480), Benzo(b)Fluoranthene (900), Benzo(a)Pyrene (510), Indeno(1,2,3-cd)Pyrene (420), Benzo(g,h,i)Perylene (530) and nine (9) SVOA TICs; and Aroclor 1242 (3400).~~

~~Sample EH047 reported no VOA TCLs or VOA TICs; SVOAs Naphthalene (1800), 2-Methylnaphthalene (3300), Dibenzofuran (620), Phenanthrene (1300), Di-n-Butylphthalate (100), Fluoranthene (900), Pyrene (380), Benzo(a)Anthracene (430), Chrysene (420), Benzo(b)Fluoranthene (900), Benzo(a)Pyrene (500), Indeno(1,2,3-cd)Pyrene (290), Benzo(g,h,i)Perylene (440) and twenty (20) SVOA TICs; and Aroclor 1260 (455).~~

~~Sample EH050 is the soil duplicate of sample EH049.~~

~~Sample EH049 reported no VOA TCL's and no VOA TICs; SVOAs Naphthalene (170), 2-Methylnaphthalene (270), Phenanthrene (165), Fluoranthene (190), Pyrene (110), Benzo(a)Anthracene (80), Bis(2-Ethylhexyl)phthalate (75), Chrysene (125), Benzo(b)Fluoranthene (185), Benzo(a)Pyrene (100), Indeno(1,2,3-cd)Pyrene (105), Benzo(g,h,i)Perylene (125) and seventeen (17) SVOA TICs; no pesticide residues.~~

~~Sample EH050 reported Methylene chloride (1) and no VOA TICs; SVOAs Naphthalene (130), 2-Methylnaphthalene (160), Acenaphthalene (13), Acenaphthene (64), Dibenzofuran (60), Fluorene (59), Phenanthrene (730), Anthracene (170), Fluoranthene (1600), Pyrene (1100), Benzo(a)Anthracene (840), Chrysene (560), Benzo(b)Fluoranthene (860), Benzo(k)Fluoranthene (460), Benzo(a)Pyrene (420), Indeno(1,2,3-cd)Pyrene (340), Dibenz(a,h)Anthracene (1140), Benzo(g,h,i)Perylene (440) and twenty (20) SVOA TICs; Pesticide 4,4'-DDE (71).~~

8.) Internal Standards

All soil VOA internal standards were acceptable.

All soil SVOA internal standards were acceptable.

9.) **Compound Identification**

The identification of SVOA TIC compound Benzo(j)Fluoranthene in SVOA samples EHQ42, 48 and 50 is not correct. The mass spectral data given is not unique enough to assign a definite match. The compound should be reported as an unknown.

10.) **Compound Quantitation and Reported Detection Limits**

All reported quantitations and detection limits for VOA, SVOA and pesticide/PCB samples are acceptable.

11.) **System Performance**

GC/MS baseline was acceptable.

GC baseline was acceptable.

12.) **Additional Case Specific Problems and/or Information**

There were a large number of SVOA sample TIC's in SVOA soil samples EHQ42 (14), EHQ45 (20), EHQ47 (20), EHQ48 (20), EHQ49 (17) and EHQ50 (20).

Sample EHQ43, 44, 45, and 46 reported Aroclor 1242.

Sample EHQ47 reported Aroclor 1260.

Sample EHQ48 reported Aroclor 1260 and Pesticide Heptachlor Epoxide.

Sample EHQ50 reported Pesticide 4,4'-DDE.

Fluoranthene exceeded the Calibration range in sample EHQ48 (SVOA). Fluoranthene was diluted out in EHQ48DL. Therefore, results for this Compound should be estimated.

13.) **Overall Assessment**

WAW 12/21/90

The laboratory exceeded holding times on all samples in the VOA fraction by three (3) days.

There were no sample duplicates; disregard information below.

~~There were some problems concerning agreement between soil duplicates in the SVOA, Pesticide and PCB fractions.~~

~~Sample EHQ47 reported Naphthalene (1600) and 2-~~

~~Methylnaphthalene (3300) while the duplicate sample EHQ43~~

~~did not report these compounds at all. EHQ47 reported~~

~~Aroclor 1260 while EHQ43 reported Aroclor 1242.~~

~~Sample EHQ49 reported no Pesticide residues while the~~

W. Lisa Wilson
1/11/91

~~duplicate sample EHQ50 reported 4,4'-DDE.~~

This reviewer found no additional case problems.

Reviewed By Walter Mc Carthy Weston/ESAT

Date 12/21/90 312-353-2960

CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDSCASE/SAS # 14960CONTRACTOR ENCOTEC

Instrument #	004	Init. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
DATE/TIME:	10-05-90					
	RF	%RSD	*	RF	%D	*
Chloromethane						
Bromomethane						
Vinyl Chloride						
Chloroethane						
Methylene Chloride						
Acetone	.677	50.4	J			
Carbon Disulfide						
1,1-Dichloroethane						
1,1-Dichloroethene						
Trans-1,2-Dichloroethene						
Chloroform						
2-Butanone	.163	33.6	J			
1,2-Dichloroethane						
1,1,1-Trichloroethane						
Carbon Tetrachloride						
Vinyl Acetate						
Bromodichloromethane						
1,2-Dichloropropane						
Trans-1,3-Dichloropropene						
Trichloroethene						
Dibromochloromethane						
1,1,2-Trichloroethane						
Benzene						
cis-1,3-Dichloropropene						
2-Chloroethylvinylether						
Bromoform						
4-Methyl-2-Pentanone						
2-Hexanone	.368	34.8	J			
Tetrachloroethene						
1,1,2,2-Tetrachloroethane						
Toluene						
Chlorobenzene						
Ethylbenzene						
Styrene						
m-Xylene						
o/p-Xylene						

AFFECTED
SAMPLES:Reviewer's
Initials/Date: MM 12/19/90MM
12/19/90

EHQ42

EHQ43

EHQ44

EHQ45

EHQ46

EHQ47

EHQ48

EHQ49

EHQ50

EHQ45 MS

EHQ45 MS

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE/SAS # 14960

CONTRACTOR ENCOTEC

Instrument # 004	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	10-22-90			10/23/90 5:06			10/23/90 2140								
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol															
bis(-2-Chloroethyl)Ether		-													
2-Chlorophenol															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
Benzyl Alcohol	.511	26.5	J	.248	51.5	J	.155	69.7	J						
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether															
4-Methylphenol															
N-Nitroso-Di-n-Propylamine															
Hexachloroethane															
Nitrobenzene	.708			.468	33.9	J	.387	45.3	J						
Isophorone	.933						.697	25.3	J						
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid	.162	35.2	J	.227	40.1	J									
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline	.082			.061	25.6	J									
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene															
2,4,6-Trichlorophenol															
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline	.532						.336	36.8	J						
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline															
Acenaphthene															
2,4-Dinitrophenol															
4-Nitrophenol	.146			.095	34.9	J									
Dibenzofuran															
AFFECTED SAMPLES:															
EHQ42				SBLK 2				EHQ48 DL							
EHQ43				EHQ50				EHQ50 DL							
EHQ44				EH											
EHQ45															
EHQ46															
EHQ47															
EHQ48															
EHQ49															

Reviewer
Initials/Date: MM 12/19/90

* These flags should be applied to the analytes on the sample data sheets.

8/87

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS

Page 2

CASE/SAS # 14960CONTRACTOR ENCOTEC

Instrument # 004	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	10-22-90			10/23/90 15:06			10/23/90 2140					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene												
2,6-Dinitrotoluene												
Diethylphthalate												
4-Chlorophenyl-phenylether												
Fluorene												
4-Nitroaniline	.145			.258	77.9	J	.144	33.8	J			
4,6-Dinitro-2-Methylphenol												
N-Nitrosodiphenylamine												
4-Bromophenyl-phenylether												
Hexachlorobenzene												
Pentachlorophenol												
Phenanthrene												
Anthracene												
Di-n-Butylphthalate												
Fluoranthene												
Pyrene	2.337			1.675	26.3	J	1.487	36.4	J			
Butylbenzylphthalate	1.169			.876	25.1	J	.621	46.9	J			
Benzo(a)Anthracene	1.85			1.221	34.0	J	1.162	37.2	J			
bis(2-Ethylhexyl)Pnthalate	1.694						.865	48.9	J			
Chrysene												
Di-n-Octyl Pnthalate												
Benzo(b)Fluoranthene												
Benzo(k)Fluoranthene												
Benzo(a)Pyrene												
Indeno(1,2,3-cd)Pyrene												
Dibenz(a,h)Anthracene												
Benzo(g,h,i) Perylene												
3,3'-Dichlorobenzidine	.354			.206	41.8	J	.239	32.5	J			

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: MM 12/19/90

8/87

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

- U - Indicates compound was analyzed but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330 \text{ U}) \times \text{df}}{D} \quad \text{where } D = \frac{100 - \% \text{ moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} = 0.76$$

$$\frac{(330 \text{ U})}{.76} \times 10 = 4300 \text{ U} \quad \text{rounded to the appropriate number of significant figures}$$

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

- J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract shall be confirmed by GC/MS.

DATA REPORTING QUALIFIERS - PAGE 2

- B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.
- A - This flag indicates that TIC is a suspected aldol-condensation product.
- X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

- U - Indicates compound was analyzed but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330 \text{ U}) \times \text{df}}{D} \quad \text{where } D = \frac{100 - \% \text{ moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} = 0.76$$

$$\frac{(330 \text{ U}) \times 10}{.76} = 4300 \text{ U} \quad \text{rounded to the appropriate number of significant figures}$$

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

- J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ul in the final extract shall be confirmed by GC/MS.

DATA REPORTING QUALIFIERS - PAGE 2

- B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.
- A - This flag indicates that TIC is a suspected aldol-condensation product.
- X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

EPA		United States Environmental Protection Agency Contract Laboratory Program Sample Management Office PO Box 818 Alexandria, VA 22313 703-557-2490 FTS 557-2490		Organic Traffic Report (For CLP Use Only)		Case Number 14960	SAS No. (if applicable) N/A			
1. Type of Activity (Check one) <input type="checkbox"/> ENF <input type="checkbox"/> NPLD <input type="checkbox"/> RA <input checked="" type="checkbox"/> SI <input type="checkbox"/> STSI <input type="checkbox"/> ER <input type="checkbox"/> O&M <input type="checkbox"/> RD <input type="checkbox"/> ST <input type="checkbox"/> Other (Specify) <input type="checkbox"/> ESI <input type="checkbox"/> PA <input type="checkbox"/> RIFS <input type="checkbox"/> STPA		2. Region Number V		Sampling Co. FIT		4. Date Shipped 9-25-90				
Non-Superfund Program		3. Ship To: SCOTT DEWORE ENV. CONTROL TECH 3985 RESEARCH PARK DR. ANN ARBOR, MI 48108		Airbill Number 9157647284		5. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (SAS) 7. Waste (SAS) 8. Other (SAS) (Specify)				
Site Name MANSFIELD PRODUCTS CO.		Site Soil ID N/A		Triple volume required for matrix spike/duplicate aqueous sample.		IF VOA SAMPLE PRESERVED INDICATE IN COLUMN C WITH Y OR N.				
City, State MANSFIELD, OH		See reverse for additional instructions.		Ship medium and high concentration samples in paint cans.						
CLP Sample Number (From labels)	(A) Sample Description (From box 5)	(B) Concentration L=low M=med H=high	(C) RAS Analysis				(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number
			VOA	BNA	Pest/PCB	ARO/TOX				
EHQ 42	5	L	N	X	X			S1	9-25-90 1630	MEHA 35
EHQ 43	5	L	N	X	X			S2	9-25-90 1230	MEHA 36
EHQ 44	5	L	N	X	X			S3	9-25-90 1400	MEHA 37
EHQ 45	5	L	N	X	X			S4	9-25-90 1445	MEHA 38
EHQ 46	5	L	N	X	X			S5	9-25-90 1520	MEHA 39
EHQ 47	5	L	N	X	X			S6	9-25-90 1230	MEHA 40
EHQ 48	5	L	N	X	X			S7	9-25-90 1300	MEHA 41
EHQ 49	5	L	N	X	X			S8	9-25-90 1330	MEHA 42
EHQ 50	5	L	N	X	X			S9	9-25-90 1330	MEHA 43
SHIPMENT IS COMPLETE										

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report

(For CLP Use Only)

Case Number

SAS No. (if applicable)

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (SAS) 7. Waste (SAS) 8. Other (SAS) (Specify)	2. Region Number	Sampling Co.	4. Date Shipped	Carrier	5. Date Received	Received by
	Sampler (Name)		Airbill Number		Laboratory Contract Number	Unit Price
IF VOA SAMPLE PRESERVED INDICATE IN COLUMN C WITH Y OR N.	3. Ship To:		Triple volume required for matrix spike/duplicate aqueous sample.		6. Transfer to	Date Received
			Ship medium and high concentration samples in paint cans.		Received by	
			See reverse for additional instructions.		Contract Number	Price

[illegible]

NARRATIVE

Case 14960

A total of nine (9) samples were received by ENCOTEC on September 26, 1990 and were scheduled for Organics Analysis under Contract #68-D9-0033, first bid lot. Please refer to the following table for vital information that pertains to this case.

Table 1.0

SDG #: EHQ42

	SAMPLE ANALYZED			
	Actual	QC	Re-Run	Total
	<u>Samples</u>	<u>Samples</u>	<u>Samples</u>	<u>Analyses</u>
Volatile Analyses	9	2	0	11
Semivolatile Analyses	9	2	0	11
Pesticide/PCB Analyses	9	2	0	11

Total Cumulate Billable Full Analyses: 11

This Deliverables Package is assembled in accordance with instructions in Section B, 2/88 revision of the Contract Laboratory Program - Statement of Work. A copy of this deliverable has been distributed to Region V, the Sample Management Office (SMO) and EMSL-LV. In addition a sample Summary Data Package and Diskette Deliverable has been sent to SMO.

The following is a detailed description of quality control sample, shipment and/or analytical problems that were encountered in the processing of these samples.

Sample Control/Sample Custody

Samples from this case were received by Federal Express courier on September 26, 1990. All samples were received in good condition with sample tags and method custody information. However, samples EHQ46 and EHQ48 were received in metals in ten bottles instead of the regular BNA/extractable bottle. A phone call was made. We also received a very light Organic traffic report. The region was contacted and sent a more legible copy of the original. Samples were scheduled for analysis.

Extraction/Sample Preparation

Soil samples EHQ42-50 were extracted for pesticide/pcb and semivolatile parameters on 09/27/90. All samples were screened on GC (EC and FID detectors) and were determined low level. The matrix spike and spike duplicate were extracted on 10/04/90. All samples were then processed according to CLP protocol. The final extracts were given for analysis to the GC and GC/MS groups on 10/10/90.

Volatile Analyses

The volatile analysis was performed without any major difficulties. The samples were analyzed on the tenth day of receipt of Case #14960.

The method blank was found to contain Trichloroethene (CAS #79-01-6) and Toluene (CAS #108-88-3). The Trichloroethene contamination is currently under investigation. The Toluene contamination has been found to be connected to our current construction that has just been completed. Both these compounds were found to be less than contract required detection limits (CRQL).

In general, the samples were found to have no hazardous substance list (HSL) compounds positive hits, except SMO sample EHQ45 which was found to have Acetone (CAS #67-64-1) below CRQL;

EHQ47 and EHQ50 were found to contain Methylene Chloride (CAS #75-09-2) with both samples having Methylene Chloride below CRQL. Sample EHQ48 was found to contain Methylene Chloride, Ethylbenzene (CAS #100-41-4) and Total Xylene (CAS #1330-20-7). The Methylene Chloride and Ethylbenzene were found to be below CRQL, while the Total Xylenes were found to be above CRQL.

The QA/QC was excellent. No surrogate percent recoveries were outside of contract required limits, as were no EICPs. The matrix spike and matrix spike duplicate had no percent recoveries and only two relative percent differences outside of contract advisory limits.

Semivolatile Analysis

Semivolatile analysis proceeded without much difficulty. Method blanks were nearly contaminant free. Overall QA/QA was excellent.

Method blank analysis were relatively clean. Only a few Tentatively Identified Compounds were found to be present in the blanks. No Target Compounds were detected. Please see Semivolatile Raw QC Data package for a complete run-down.

Sample analysis revealed positive hits for both Target and Tentatively Identified Compounds. Two of these samples (EHQ48 and EHQ50) required analysis at an secondary dilution. Both of these samples had positive hits for Fluoranthene (CAS# 206-44-0) that exceeded their linear quantitation range during their initial analysis. The rest of the compounds were at relatively low concentrations. The Semivolatile Sample Data package contains all the particulars.

QA/QC was excellent in general. All contract required criteria including surrogate recoveries, EICP Standard Area's, Standard Retention Times, Tune Criteria, SPCC's & CCC's

and holding times were met. All other criteria were within contract suggested limits. Please see Semivolatile QC Summary Data package for complete details.

Calculations of the water semivolatile samples appeared to differ by a factor of two in the audit. This arose from the fact that the final volume of extract was split in half and combined to produce 1 ml at analysis. During analysis, the laboratory injected 2 ul of the sample to achieve proper CRQL's. The original split was performed to save sample for a possible reanalysis since our current autosampler requires large volumes of sample extract during operation.

Pesticide/PCB Analysis

The pesticide portion of case 14960, SDG# EHQ42 was completed with little difficulty. The QA/QC for these low level soils was good with 6 out of 19 surrogate recoveries outside QC limits. Note the 6 surrogates outside limits were most likely due to the interferences caused by the of high levels PCB's in these samples. The remaining QA/QC was excellent with 0 out of 12 MS/MSD's outside QC limits and 0 out of 6 RPD's outside limits. All blanks were determined to be free of HSL pesticides/PCBs above CRQL.

Some special notes should be mentioned concerning SDG# EHQ42. The ZZZZZ's on form 8E indicate samples, standards and hexane blanks run which were labeled as bad. Some further notes regarding forms 8E: The variation in analysis time between #26 (RT1633) and #27 (RT1847) was due to the high levels of PCB's in sample EHQ49 run at #26. The instrument was placed in bakeout before continuing with a hexane blank at # 27. An auto sampler malfunction occurred at #30. The problem was corrected and the run continued at #35. Some further problems were encountered meeting compliance requirements with the close-out standards. The INDA run at #47 (RT1148) was reshot until compliance was met at #49 (RT1425). The

INDB required several reshoots in addition to the original injection at #51 (RT1626) in order to meet compliance at #57 (RT2159).

The following special flags are used by ENCOTEC in the pesticide/PCB analysis.

- X-flag : The X flag denotes manually entered data. This always occurs on multi-component quantitations and sometimes occurs on individual pesticides when the analyst had to correct the integration of a peak.
- Z-flag : The Z flag indicates a poor agreement between values obtained on a quantitation using both columns. When the quantitation on both columns gives a ratio from 0.7 to 1.4, a confirmation is assumed. If the ratio ranges above 1.4 but below 1.7 or below 0.7 but above 0.5, then there is some degree of uncertainty as to the validity of the confirmation. A Z flag is then added to indicate the suspect data. Ratios above 1.7 or below 0.5 are considered false postivies and are not reported. GC/MS confirmation is performed on all quantitations if the concentration is great enough. If GC/MS confirms a compound, it is reported without regard to the ratio.
- J-flag : The J flag is used to indicate the presence of HSL pesticides and/or PCBs below the CRDL. In order to use this flag, the ratio MUST be between 0.7 and 1.4 A J flag is not given to any compound quantitatied lower than five times below the CRQL.
- Y-flag : The Y flag is used to indicate that quantitation was performed on the secondary dilution of a sample.

Sample Summary

The following samples within SDG EHQ42 were determined to be free of all HSL pesticides/PCBs above CRQLs: EHQ42, and EHQ49.

The following samples were determined to contain these analytes:

EHQ43 was found to contain Aroclor 1242 (CAS# 53469-21-9), at levels above CRQL's.

EHQ44 was analyzed straight and at a 1:3 dilution with both runs confirmed positive for Aroclor 1242 (CAS# 53469-21-9) at levels above CRQL's.

EHQ45 was analyzed straight and at a 1:2 dilution with both runs confirmed positive for Aroclor 1242 (CAS# 53469-21-9) at levels above CRQL's.

EHQ46 was analyzed straight and at a 1:2 dilution with both injections confirmed positive for Aroclor 1242 (CAS# 53469-21-9) at levels above CRQL's.

EHQ47 was analyzed straight and at a 1:2 dilution with both injections confirmed positive for Aroclor 1260 (CAS# 11096-82-5) at levels above CRQL's.

EHQ48 was analyzed straight and at a 1:4 dilution with both injections confirmed positive for Heptachlor epoxide (CAS#1024-57-3), and Aroclor 1260 (CAS# 11096-82-5) at levels above CRQL's.

EHQ50 was found to contain 4,4'-DDE (CAS# 72-55-9) at levels less than CRQL's; it was therefore flagged with a J.

NOTE: There was some difficulty in determining the levels of Aroclor 1260 in samples EHQ47 and EHQ48 due to the presence of interfering contaminants which respond to on EC detector. Sample EHQ50 also contained interfering levels of contaminants which respond to an EC detector. It was therefore analyzed at a 1:2 dilution.

Any technical questions regarding the data present in this deliverable should be addressed to the individual whose name appears at the end of this case narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions implied or detailed above. Release of the information contained in this hardcopy data package and in the computer - readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature:

C. Michael O'Quinn (cm) 10/30/90

C. Michael O'Quinn
Assistant Laboratory Manager
CLP Project Manager

CMO/crn
75100

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	EHQ42	110	103	98		0
02	EHQ43	103	106	95		0
03	EHQ44	103	101	92		0
04	EHQ45	115	86	91		0
05	EHQ46	102	103	92		0
06	EHQ47	113	92	91		0
07	EHQ48	114	94	95		0
08	EHQ49	109	90	91		0
09	EHQ50	116	97	93		0
10	EHQ45MS	109	106	88		0
11	EHQ45MSD	105	99	96		0
12	VBLK1	101	108	91		0

QC LIMITS

S1 (TOL) = Toluene-d8 (81-117)

S2 (BFB) = Bromofluorobenzene (74-121)

S3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	EHQ42	66	71	62	64	63	78		0
02	EHQ43	75	78	68	77	76	77		0
03	EHQ44	71	77	68	70	68	82		0
04	EHQ45	70	76	66	73	73	88		0
05	EHQ46	71	78	72	73	74	90		0
06	EHQ47	80	84	65	77	79	92		0
07	EHQ48	71	76	62	65	71	79		0
08	EHQ48DL	73	69	79	49	76	106		0
09	EHQ49	64	72	60	61	70	76		0
10	EHQ50	68	72	81	58	65	76		0
11	EHQ50DL	69	68	79	45	69	105		0
12	EHQ49MS	80	87	85	77	82	89		0
13	EHQ49MSD	84	86	90	81	82	88		0
14	SBLK1	65	72	75	60	60	49		0
15	SBLK2	84	62	93	53	66	42		0

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (23-120)
 S2 (FBP) = 2-Fluorobiphenyl (30-115)
 S3 (TPH) = Terphenyl (18-137)
 S4 (PHL) = Phenol-d5 (24-113)
 S5 (2FP) = 2-Fluorophenol (25-121)
 S6 (TBP) = 2,4,6-Tribromophenol (19-122)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogates diluted out

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033
 Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42
 Level: (low/med) LOW

	EPA	S1	OTHER
	SAMPLE NO.	(DBC)#	
01	PBLKL1	86	0
02	PBLKL2	91	0
03	EHQ42	101	0
04	EHQ43	113	0
05	EHQ44	116	0
06	EHQ44DL	119	0
07	EHQ45	127	0
08	EHQ45DL	125	0
09	EHQ46	145	0
10	EHQ46DL	135	0
11	EHQ47	250 *	0
12	EHQ47DL	211 *	0
13	EHQ48	231 *	0
14	EHQ48DL	229 *	0
15	EHQ49	517 *	0
16	EHQ49DL	130	0
17	EHQ50	136	0
18	EHQ49MS	151 *	0
19	EHQ49MSD	116	0

ADVISORY
QC LIMITS
(20-150)

S1 (DBC) = Dibutylchloroendate

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENCOTEC - AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EH42

Matrix Spike - EPA Sample No.: EH45

Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	72.5	0	67.0	92	59-172
Trichloroethene	72.5	0	60.3	83	62-137
Benzene	72.5	0	61.5	85	66-142
Toluene	72.5	0	76.2	105	59-139
Chlorobenzene	72.5	0	66.5	92	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	72.5	50.0	69	29 *	22	59-172
Trichloroethene	72.5	52.2	72	14	24	62-137
Benzene	72.5	51.5	71	18	21	66-142
Toluene	72.5	66.4	92	13	21	59-139
Chlorobenzene	72.5	56.4	78	16	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENCOTEC - AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EH42

Matrix Spike - EPA Sample No.: EH49

Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	14500	0	7760	54	26- 90
2-Chlorophenol	14500	0	10500	72	25-102
1,4-Dichlorobenzene	7250	0	3370	46	28 104
N-Nitroso-di-n-prop.(1)	7250	0	5590	77	41 126
1,2,4-Trichlorobenzene	7250	0	5210	72	38 107
4-Chloro-3-methylphenol	14500	0	9860	68	26 103
Acenaphthene	7250	0	4030	56	31-137
4-Nitrophenol	14500	0	15800	108	11-114
2,4-Dinitrotoluene	7250	0	3890	54	28- 89
Pentachlorophenol	14500	0	8050	56	17-109
Pyrene	7250	223	5460	72	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
Phenol	14500	7690	53	2	35	26- 90
2-Chlorophenol	14500	10700	74	-3	50	25-102
1,4-Dichlorobenzene	7250	3440	47	-2	27	28 104
N-Nitroso-di-n-prop.(1)	7250	5660	78	-1	38	41 126
1,2,4-Trichlorobenzene	7250	5370	74	-3	23	38 107
4-Chloro-3-methylphenol	14500	9790	68	0	33	26 103
Acenaphthene	7250	4030	56	0	19	31-137
4-Nitrophenol	14500	16900	117 *	-8	50	11-114
2,4-Dinitrotoluene	7250	4190	58	-7	47	28- 89
Pentachlorophenol	14500	8050	56	0	47	17-109
Pyrene	7250	5450	72	0	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 11 outside limits

Spike Recovery: 1 out of 22 outside limits

COMMENTS:

3F
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033
 Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42
 Matrix Spike - EPA Sample No.: EHQ49 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	58.5	0	56.8	97	46-127
Heptachlor	58.5	0	59.5	102	35-130
Aldrin	58.5	0	65.2	112	34-132
Dieldrin	146	0	155	106	31-134
Endrin	146	0	168	115	42-139
4,4'-DDT	146	0	173	118	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
gamma-BHC (Lindane)	58.5	59.7	102	-5	50 46-127
Heptachlor	58.5	62.0	106	-4	31 35-130
Aldrin	58.5	69.1	118	-5	43 34-132
Dieldrin	146	177	121	-13	38 31-134
Endrin	146	177	121	-5	45 42-139
4,4'-DDT	146	179	123	-4	50 23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
 Spike Recovery: 0 out of 12 outside limits

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Lab File ID: VSB1005F

Lab Sample ID: VSB1005F

Date Analyzed: 10/05/90

Time Analyzed: 1224

Matrix: (soil/water) SOIL

Level:(low/med) LOW

Instrument ID: 006

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
	=====	=====	=====	=====
01	EHQ42	EHQ42V	EHQ42V	1304
02	EHQ43	EHQ43V	EHQ43V	1344
03	EHQ44	EHQ44V	EHQ44V	1427
04	EHQ45	EHQ45V	EHQ45V	1506
05	EHQ46	EHQ46V	EHQ46V	1545
06	EHQ47	EHQ47V	EHQ47V	1624
07	EHQ48	EHQ48V	EHQ48V	1703
08	EHQ49	EHQ49V	EHQ49V	1742
09	EHQ50	EHQ50V	EHQ50V	1821
10	EHQ45MS	EHQ45VM	EHQ45VM	1901
11	EHQ45MSD	EHQ45VD	EHQ45VD	1940

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033
 Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EH42
 Lab File ID: LSB0927C Lab Sample ID: LSB0927C
 Date Extracted: 09/27/90 Extraction: (SepF/Cont/Sonc) SONC
 Date Analyzed: 10/22/90 Time Analyzed: 2038
 Matrix: (soil/water) SOIL Level: (low/med) LOW
 Instrument ID: 004

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	EHQ42	EHQ42B	EHQ42B	10/22/90
02	EHQ43	EHQ43B	EHQ43B	10/22/90
03	EHQ44	EHQ44B	EHQ44B	10/22/90
04	EHQ45	EHQ45B	EHQ45B	10/22/90
05	EHQ46	EHQ46B	EHQ46B	10/23/90
06	EHQ47	EHQ47B	EHQ47B	10/23/90
07	EHQ48	EHQ48B	EHQ48B	10/23/90
08	EHQ48DL	EHQ48BDL	EHQ48BDL	10/23/90
09	EHQ49	EHQ49B	EHQ49B	10/23/90
10	EHQ50	EHQ50B	EHQ50B	10/23/90
11	EHQ50DL	EHQ50BDL	EHQ50BDL	10/23/90

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033
Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42
Lab File ID: LSB1004D Lab Sample ID: LSB1004D
Date Extracted: 10/04/90 Extraction: (SepF/Cont/Sonc) SONC
Date Analyzed: 10/23/90 Time Analyzed: 0552
Matrix: (soil/water) SOIL Level: (low/med) LOW
Instrument ID: 004

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	EHQ49MS	EHQ49BMS	EHQ49BMS	10/23/90
02	EHQ49MSD	EHQ49BMSD	EHQ49BMSD	10/23/90

COMMENTS:

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033
 Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42
 Lab Sample ID: MB092790-3 Lab File ID: _____
 Matrix: (soil/water) SOIL Level: (low/med) LOW
 Date Extracted: 09/27/90 Extraction: (SepF/Cont/Sonc) SONC
 Date Analyzed (1): 10/24/90 Date Analyzed (2): 10/24/90
 Time Analyzed (1): 0522 Time Analyzed (2): 0522
 Instrument ID (1): 3600-1D Instrument ID (2): 3600-1E
 GC Column ID (1): RTX-35 GC Column ID (2): DB-5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01:EHQ42	60224	10/24/90	10/24/90
02:EHQ43	60225	10/24/90	10/24/90
03:EHQ44	60226	10/24/90	10/24/90
04:EHQ44DL	602263	10/24/90	10/24/90
05:EHQ45	60227	10/24/90	10/24/90
06:EHQ45DL	602272	10/24/90	10/24/90
07:EHQ46	60228	10/24/90	10/24/90
08:EHQ46DL	602282	10/25/90	10/25/90
09:EHQ47	60229	10/24/90	10/24/90
10:EHQ47DL	602292	10/25/90	10/25/90
11:EHQ48	60230	10/24/90	10/24/90
12:EHQ48DL	602304	10/25/90	10/25/90
13:EHQ49	60231	10/24/90	10/24/90
14:EHQ49DL	602312	10/25/90	10/25/90
15:EHQ50	602322	10/25/90	10/25/90

COMMENTS:

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033
 Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42
 Lab Sample ID: MB100490-1 Lab File ID: _____
 Matrix: (soil/water) SOIL Level: (low/med) LOW
 Date Extracted: 10/04/90 Extraction: (SepF/Cont/Sonc) SONC
 Date Analyzed (1): 10/24/90 Date Analyzed (2): 10/24/90
 Time Analyzed (1): 0614 Time Analyzed (2): 0614
 Instrument ID (1): 3600-1D Instrument ID (2): 3600-1E
 GC Column ID (1): RTX-35 GC Column ID (2): DB-5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EHQ49MS	60231MS	10/25/90	10/25/90
02	EHQ49MSD	60231MSD	10/25/90	10/25/90

COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EH42

Matrix: (soil/water) SOIL

Lab Sample ID: VSB1005F

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: VSB1005F

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/05/90

Column: (pack/cap) CAP

Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	(Total)-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	1	J
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VELK1

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EH42

Matrix: (soil/water) SOIL

Lab Sample ID: VSB1005F

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: VSB1005F

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
_____	_____	_____	_____	_____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EH42

Matrix: (soil/water) SOIL

Lab Sample ID: LSB0927C

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: LSB0927C

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc)

SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH:

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	660	U
111-44-4	bis(2-Chloroethyl)Ether	660	U
95-57-8	2-Chlorophenol	660	U
541-73-1	1,3-Dichlorobenzene	660	U
108-46-7	1,4-Dichlorobenzene	660	U
100-51-6	Benzyl Alcohol	660	U
95-50-1	1,2-Dichlorobenzene	660	U
95-48-7	2-Methylphenol	660	U
39638-32-9	bis(2-Chloroisopropyl)Ether	660	U
106-44-5	4-Methylphenol	660	U
621-64-7	N-Nitroso-Di-n-Propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
65-85-0	Benzoic Acid	3200	U
111-91-1	bis(2-Chloroethoxy)Methane	660	U
120-83-2	2,4-Dichlorophenol	660	U
120-82-1	1,2,4-Trichlorobenzene	660	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	660	U
59-50-7	4-Chloro-3-Methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclopentadiene	660	U
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	3200	U
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethyl Phthalate	660	U
208-96-8	Acenaphthylene	660	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EH42

Matrix: (soil/water) SOIL

Lab Sample ID: LSB0927C

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: LSB0927C

Level: (low/med) LOW

Date Received:

% Moisture: not dec. dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH:

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2-----	3-Nitroaniline	3200	U
83-32-9-----	Acenaphthene	660	U
51-28-5-----	2,4-Dinitrophenol	3200	U
100-02-7-----	4-Nitrophenol	3200	U
132-64-9-----	Dibenzofuran	660	U
121-14-2-----	2,4-Dinitrotoluene	660	U
606-20-2-----	2,6-Dinitrotoluene	660	U
84-66-2-----	Diethylphthalate	660	U
7005-72-3-----	4-Chlorophenyl-phenylether	660	U
86-73-7-----	Fluorene	660	U
100-10-6-----	4-Nitroaniline	3200	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	3200	U
86-30-6-----	N-Nitrosodiphenylamine (1)	660	U
101-55-3-----	4-Bromophenyl-phenylether	660	U
118-74-1-----	Hexachlorobenzene	660	U
87-86-5-----	Pentachlorophenol	3200	U
85-01-8-----	Phenanthrene	660	U
120-12-7-----	Anthracene	660	U
84-74-2-----	Di-n-Butylphthalate	660	U
206-44-0-----	Fluoranthene	660	U
129-00-0-----	Pyrene	660	U
85-68-7-----	Butylbenzylphthalate	660	U
91-94-1-----	3,3'-Dichlorobenzidine	1300	U
56-55-3-----	Benzo(a)Anthracene	660	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	660	U
218-01-9-----	Chrysene	660	U
117-84-0-----	Di-n-Octyl Phthalate	660	U
205-99-2-----	Benzo(b)Fluoranthene	660	U
207-08-9-----	Benzo(k)Fluoranthene	660	U
50-32-8-----	Benzo(a)Pyrene	660	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	660	U
53-70-3-----	Dibenz(a,h)Anthracene	660	U
191-24-2-----	Benzo(g,h,i)Perylene	660	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK1

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: LSB0927C

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: LSB0927C

Level: (low/med) LOW

Date Received:

% Moisture: not dec. dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH:

Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: LSB1004D

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: LSB1004D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

dec.

Date Extracted: 10/04/90

Extraction: (SepF/Cont/Sonc)

SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH:

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	660	U
111-44-4	bis(2-Chloroethyl)Ether	660	U
95-57-8	2-Chlorophenol	660	U
541-73-1	1,3-Dichlorobenzene	660	U
106-46-7	1,4-Dichlorobenzene	660	U
100-51-6	Benzyl Alcohol	660	U
95-50-1	1,2-Dichlorobenzene	660	U
95-48-7	2-Methylphenol	660	U
39638-32-9	bis(2-Chloroisopropyl)Ether	660	U
106-44-5	4-Methylphenol	660	U
621-64-7	N-Nitroso-Di-n-Propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
65-85-0	Benzoic Acid	3200	U
111-91-1	bis(2-Chloroethoxy)Methane	660	U
120-83-2	2,4-Dichlorophenol	660	U
120-82-1	1,2,4-Trichlorobenzene	660	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	660	U
59-50-7	4-Chloro-3-Methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclopentadiene	660	U
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	3200	U
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethyl Phthalate	660	U
208-96-8	Acenaphthylene	660	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EH42

Matrix: (soil/water) SOIL

Lab Sample ID: LSB1004D

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: LSB1004D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

dec.

Date Extracted: 10/04/90

Extraction: (SepF/Cont/Sonc)

SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH:

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
132-64-9	Dibenzofuran	660	U
121-14-2	2,4-Dinitrotoluene	660	U
606-20-2	2,6-Dinitrotoluene	660	U
84-66-2	Diethylphthalate	660	U
7005-72-3	4-Chlorophenyl-phenylether	660	U
86-73-7	Fluorene	660	U
100-10-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-Methylphenol	3200	U
86-30-6	N-Nitrosodiphenylamine (1)	660	U
101-55-3	4-Bromophenyl-phenylether	660	U
118-74-1	Hexachlorobenzene	660	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	660	U
120-12-7	Anthracene	660	U
84-74-2	Di-n-Butylphthalate	660	U
206-44-0	Fluoranthene	660	U
129-00-0	Pyrene	660	U
85-68-7	Butylbenzylphthalate	660	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
56-55-3	Benzo(a)Anthracene	660	U
117-81-7	bis(2-Ethylhexyl)Phthalate	660	U
218-01-9	Chrysene	660	U
117-84-0	Di-n-Octyl Phthalate	660	U
205-99-2	Benzo(b)Fluoranthene	660	U
207-08-9	Benzo(k)Fluoranthene	660	U
50-32-8	Benzo(a)Pyrene	660	U
193-39-5	Indeno(1,2,3-cd)Pyrene	660	U
63-70-3	Dibenz(a,h)Anthracene	660	U
191-24-2	Benzo(g,h,i)Perylene	660	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK2

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: LSB1004D

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB1004D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 10/04/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: _____ Dilution Factor: 1.0

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
1. _____	UNKNOWN	3.88	400	J
2. _____	UNKNOWN	4.88	400	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKL2

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: MB100490-1

Sample wt/vol: 30.0 (g/mL) 5 Lab File ID: _____

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 10/04/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	16	U
319-85-7	beta-BHC	16	U
319-86-8	delta-BHC	16	U
58-89-9	Lindane	16	U
76-44-8	Heptachlor	16	U
309-00-2	Aldrin	16	U
1024-57-3	Heptachlor epoxide	16	U
959-98-8	Endosulfan I	16	U
60-57-1	Dieldrin	32	U
72-55-9	4,4'-DDE	32	U
72-20-8	Endrin	32	U
33213-65-9	Endosulfan II	32	U
72-54-8	4,4'-DDD	32	U
1031-07-8	Endosulfan sulfate	32	U
50-29-3	4,4'-DDT	32	U
72-43-5	Methoxychlor	160	U
53494-70-5	Endrin ketone	32	U
5103-71-9	alpha-Chlordane	160	U
5103-74-2	gamma-Chlordane	160	U
8001-35-2	Toxaphene	320	U
12674-11-2	Aroclor-1016	160	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	160	U
53469-21-9	Aroclor-1242	160	U
12672-29-6	Aroclor-1248	160	U
11097-69-1	Aroclor-1254	320	U
11096-82-5	Aroclor-1260	320	U

PBKL1

Contract: 68-D9-0033

Lab Name: ENCOTEC-AA

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EH042

Matrix: (soil/water) SOIL

Lab Sample ID: MB092790-3

Sample wt/vol: 30.0 (g/mL) 6

Lab File ID:

Level: (low/med) LOW

Date Received:

% Moisture: not dec. dec. —

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.0

Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/kg) ug/kg 0

319-84-6	alpha-BHC	16	U
319-85-7	beta-BHC	16	U
319-86-8	delta-BHC	16	U
58-89-9	Lindane	16	U
76-44-8	Heptachlor	16	U
309-00-2	Aldrin	16	U
1024-57-3	Heptachlor epoxide	16	U
959-98-8	Endosulfan I	16	U
60-57-1	Dieldrin	32	U
72-55-9	4,4'-DDE	32	U
72-20-8	Endrin	32	U
33213-65-9	Endosulfan II	32	U
72-54-8	4,4'-DDD	32	U
1031-07-8	Endosulfan sulfate	32	U
50-29-3	4,4'-DDT	32	U
72-43-5	Methoxychlor	160	U
53494-70-5	Endrin ketone	32	U
5103-71-9	alpha-Chlordane	160	U
5103-74-2	gamma-Chlordane	160	U
8001-35-2	Toxaphene	320	U
12674-11-2	Aroclor-1016	160	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	160	U
53469-21-9	Aroclor-1242	160	U
12672-29-6	Aroclor-1248	160	U
11097-69-1	Aroclor-1254	320	U
11096-82-5	Aroclor-1260	320	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ42

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ42V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ42V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 20

Date Analyzed: 10/05/90

Column: (pack/cap) CAP

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

74-87-3	-----Chloromethane	13	U
74-83-9	-----Bromomethane	13	U
75-01-4	-----Vinyl Chloride	13	U
75-00-3	-----Chloroethane	13	U
75-09-2	-----Methylene Chloride	6	U
67-64-1	-----Acetone	13	U
75-15-0	-----Carbon Disulfide	6	U
75-35-4	-----1,1-Dichloroethene	6	U
75-35-3	-----1,1-Dichloroethane	6	U
540-59-0	----- (Total)-1,2-Dichloroethene	6	U
67-66-3	-----Chloroform	6	U
107-06-2	-----1,2-Dichloroethane	6	U
78-93-3	-----2-Butanone	13	U
71-55-6	-----1,1,1-Trichloroethane	6	U
56-23-5	-----Carbon Tetrachloride	6	U
108-05-4	-----Vinyl Acetate	13	U
75-27-4	-----Bromodichloromethane	6	U
78-87-5	-----1,2-Dichloropropane	6	U
10061-01-5	-----cis-1,3-Dichloropropene	6	U
79-01-6	-----Trichloroethene	6	U
124-48-1	-----Dibromochloromethane	6	U
79-00-5	-----1,1,2-Trichloroethane	6	U
71-43-2	-----Benzene	6	U
10061-02-6	-----trans-1,3-Dichloropropene	6	U
75-25-2	-----Bromoform	6	U
108-10-1	-----4-Methyl-2-Pentanone	13	U
591-78-6	-----2-Hexanone	13	U
127-18-4	-----Tetrachloroethene	6	U
79-34-5	-----1,1,2,2-Tetrachloroethane	6	U
108-88-3	-----Toluene	6	U
108-90-7	-----Chlorobenzene	6	U
100-41-4	-----Ethylbenzene	6	U
100-42-5	-----Styrene	6	U
1330-20-7	-----Total Xylenes	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ42

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ42V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ42V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 20

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
_____	_____	_____	_____	_____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ43

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ43V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ43V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 17

Date Analyzed: 10/05/90

Column: (pack/cap) CAP

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	(Total)-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ43

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ43V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ43V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 17

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 110-43-0	2-HEPTANONE	9.72	9	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ44

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ44V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ44V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 19

Date Analyzed: 10/05/90

Column: (pack/cap) CAP

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	(Total)-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ44

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ44V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ44V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 19

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

EHQ45

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ45V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ45V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 31

Date Analyzed: 10/05/90

Column: (pack/cap) CAP

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
74-87-3	Chloromethane	14	U	
74-83-9	Bromomethane	14	U	
75-01-4	Vinyl Chloride	14	U	
75-00-3	Chloroethane	14	U	
75-09-2	Methylene Chloride	7	U	
67-64-1	Acetone	11	J	
75-15-0	Carbon Disulfide	7	U	
75-35-4	1,1-Dichloroethene	7	U	
75-35-3	1,1-Dichloroethane	7	U	
540-59-0	(Total)-1,2-Dichloroethene	7	U	
67-66-3	Chloroform	7	U	
107-06-2	1,2-Dichloroethane	7	U	
78-93-3	2-Butanone	14	U	
71-55-6	1,1,1-Trichloroethane	7	U	
56-23-5	Carbon Tetrachloride	7	U	
108-05-4	Vinyl Acetate	14	U	
75-27-4	Bromodichloromethane	7	U	
78-87-5	1,2-Dichloropropane	7	U	
10061-01-5	cis-1,3-Dichloropropene	7	U	
79-01-6	Trichloroethene	7	U	
124-48-1	Dibromochloromethane	7	U	
79-00-5	1,1,2-Trichloroethane	7	U	
71-43-2	Benzene	7	U	
10061-02-6	trans-1,3-Dichloropropene	7	U	
75-25-2	Bromoform	7	U	
108-10-1	4-Methyl-2-Pentanone	14	U	
591-78-6	2-Hexanone	14	U	
127-18-4	Tetrachloroethene	7	U	
79-34-5	1,1,2,2-Tetrachloroethane	7	U	
108-88-3	Toluene	7	U	
108-90-7	Chlorobenzene	7	U	
100-41-4	Ethylbenzene	7	U	
100-42-5	Styrene	7	U	
1330-20-7	Total Xylenes	7	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ45

Lab Name: ENCOTEC-AA Contract: 68-D9-0033
Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42
Matrix: (soil/water) SOIL Lab Sample ID: EHQ45V
Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ45V
Level: (low/med) LOW Date Received: 09/26/90
% Moisture: not dec. 31 Date Analyzed: 10/05/90
Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	7.72	20	J
2. _____	UNKNOWN ALKANE	19.03	40	J
3. _____	UNKNOWN	19.73	10	J
4. _____	UNKNOWN ALKANE	20.35	10	J
5. _____	UNKNOWN	20.75	10	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

EHQ46

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ46V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ46V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 37

Date Analyzed: 10/05/90

Column: (pack/cap) CAP

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

74-87-3-----	Chloromethane	16	U
74-83-9-----	Bromomethane	16	U
75-01-4-----	Vinyl Chloride	16	U
75-00-3-----	Chloroethane	16	U
75-09-2-----	Methylene Chloride	8	U
67-64-1-----	Acetone	16	U
75-15-0-----	Carbon Disulfide	8	U
75-35-4-----	1,1-Dichloroethene	8	U
75-35-3-----	1,1-Dichloroethane	8	U
540-59-0-----	(Total)-1,2-Dichloroethene	8	U
67-66-3-----	Chloroform	8	U
107-06-2-----	1,2-Dichloroethane	8	U
78-93-3-----	2-Butanone	16	U
71-55-6-----	1,1,1-Trichloroethane	8	U
56-23-5-----	Carbon Tetrachloride	8	U
108-05-4-----	Vinyl Acetate	16	U
75-27-4-----	Bromodichloromethane	8	U
78-87-5-----	1,2-Dichloropropane	8	U
10061-01-5-----	cis-1,3-Dichloropropene	8	U
79-01-6-----	Trichloroethene	8	U
124-48-1-----	Dibromochloromethane	8	U
79-00-5-----	1,1,2-Trichloroethane	8	U
71-43-2-----	Benzene	8	U
10061-02-6-----	trans-1,3-Dichloropropene	8	U
75-25-2-----	Bromoform	8	U
108-10-1-----	4-Methyl-2-Pentanone	16	U
591-78-6-----	2-Hexanone	16	U
127-18-4-----	Tetrachloroethene	8	U
79-34-5-----	1,1,2,2-Tetrachloroethane	8	U
108-88-3-----	Toluene	2	U
108-90-7-----	Chlorobenzene	8	U
100-41-4-----	Ethylbenzene	8	U
100-42-5-----	Styrene	8	U
1330-20-7-----	Total Xylenes	8	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ46

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ46V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ46V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 37

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	19.63	8	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ47

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ47V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ47V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 18

Date Analyzed: 10/05/90

Column: (pack/cap) CAP

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	(Total)-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ47

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ47V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ47V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 18

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ48

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ48V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ48V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 6 Date Analyzed: 10/05/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

74-87-3	-----Chloromethane	11	U
74-83-9	-----Bromomethane	11	U
75-01-4	-----Vinyl Chloride	11	U
75-00-3	-----Chloroethane	11	U
75-09-2	-----Methylene Chloride	1	J
67-64-1	-----Acetone	11	U
75-15-0	-----Carbon Disulfide	5	U
75-35-4	-----1,1-Dichloroethene	5	U
75-35-3	-----1,1-Dichloroethane	5	U
540-59-0	----- (Total) -1,2-Dichloroethene	5	U
67-66-3	-----Chloroform	5	U
107-06-2	-----1,2-Dichloroethane	5	U
78-93-3	-----2-Butanone	11	U
71-55-6	-----1,1,1-Trichloroethane	5	U
56-23-5	-----Carbon Tetrachloride	5	U
108-05-4	-----Vinyl Acetate	11	U
75-27-4	-----Bromodichloromethane	5	U
78-87-5	-----1,2-Dichloropropane	5	U
10061-01-5	-----cis-1,3-Dichloropropene	5	U
79-01-6	-----Trichloroethene	5	U
124-48-1	-----Dibromochloromethane	5	U
79-00-5	-----1,1,2-Trichloroethane	5	U
71-43-2	-----Benzene	5	U
10061-02-6	-----trans-1,3-Dichloropropene	5	U
75-25-2	-----Bromoform	5	U
108-10-1	-----4-Methyl-2-Pentanone	11	U
591-78-6	-----2-Hexanone	11	U
127-18-4	-----Tetrachloroethene	5	U
79-34-5	-----1,1,2,2-Tetrachloroethane	5	U
108-88-3	-----Toluene	5	U
108-90-7	-----Chlorobenzene	5	U
100-41-4	-----Ethylbenzene	4	J
100-42-5	-----Styrene	5	U
1330-20-7	-----Total Xylenes	14	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ48

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ48V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ48V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 6

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
_____	_____	_____	_____	_____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ49

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ49V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ49V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 9 Date Analyzed: 10/05/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	(Total)-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ49

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ49V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ49V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 9

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
_____	_____	_____	_____	_____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ50

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ50V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ50V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 Date Analyzed: 10/05/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>		Q
74-87-3	-----Chloromethane	13	U	
74-83-9	-----Bromomethane	13	U	
75-01-4	-----Vinyl Chloride	13	U	
75-00-3	-----Chloroethane	13	U	
75-09-2	-----Methylene Chloride	1	J	
67-64-1	-----Acetone	13	U	
75-15-0	-----Carbon Disulfide	6	U	
75-35-4	-----1,1-Dichloroethene	6	U	
75-35-3	-----1,1-Dichloroethane	6	U	
540-59-0	----- (Total) -1,2-Dichloroethene	6	U	
67-66-3	-----Chloroform	6	U	
107-06-2	-----1,2-Dichloroethane	6	U	
78-93-3	-----2-Butanone	13	U	
71-55-6	-----1,1,1-Trichloroethane	6	U	
56-23-5	-----Carbon Tetrachloride	6	U	
108-05-4	-----Vinyl Acetate	13	U	
75-27-4	-----Bromodichloromethane	6	U	
78-87-5	-----1,2-Dichloropropane	6	U	
10061-01-5	-----cis-1,3-Dichloropropene	6	U	
79-01-6	-----Trichloroethene	6	U	
124-48-1	-----Dibromochloromethane	6	U	
79-00-5	-----1,1,2-Trichloroethane	6	U	
71-43-2	-----Benzene	6	U	
10061-02-6	-----trans-1,3-Dichloropropene	6	U	
75-25-2	-----Bromoform	6	U	
108-10-1	-----4-Methyl-2-Pentanone	13	U	
591-78-6	-----2-Hexanone	13	U	
127-18-4	-----Tetrachloroethene	6	U	
79-34-5	-----1,1,2,2-Tetrachloroethane	6	U	
108-88-3	-----Toluene	6	U	
108-90-7	-----Chlorobenzene	6	U	
100-41-4	-----Ethylbenzene	6	U	
100-42-5	-----Styrene	6	U	
1330-20-7	-----Total Xylenes	6	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ50

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ50V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: EHQ50V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 20

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
_____	_____	_____	_____	_____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ42

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ42B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ42B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 20 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH: 7.3

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	830	U
111-44-4	bis(2-Chloroethyl)Ether	830	U
95-57-8	2-Chlorophenol	830	U
541-73-1	1,3-Dichlorobenzene	830	U
106-46-7	1,4-Dichlorobenzene	830	U
100-51-6	Benzyl Alcohol	830	U
95-50-1	1,2-Dichlorobenzene	830	U
95-48-7	2-Methylphenol	830	U
39638-32-9	bis(2-Chloroisopropyl)Ether	830	U
106-44-5	4-Methylphenol	830	U
621-64-7	N-Nitroso-Di-n-Propylamine	830	U
67-72-1	Hexachloroethane	830	U
98-95-3	Nitrobenzene	830	U
78-59-1	Isophorone	830	U
88-75-5	2-Nitrophenol	830	U
105-67-9	2,4-Dimethylphenol	830	U
65-85-0	Benzoic Acid	4000	U
111-91-1	bis(2-Chloroethoxy)Methane	830	U
120-83-2	2,4-Dichlorophenol	830	U
120-82-1	1,2,4-Trichlorobenzene	830	U
91-20-3	Naphthalene	830	U
106-47-8	4-Chloroaniline	830	U
87-68-3	Hexachlorobutadiene	830	U
59-50-7	4-Chloro-3-Methylphenol	830	U
91-57-6	2-Methylnaphthalene	830	U
77-47-4	Hexachlorocyclopentadiene	830	U
88-06-2	2,4,6-Trichlorophenol	830	U
95-95-4	2,4,5-Trichlorophenol	4000	U
91-58-7	2-Chloronaphthalene	830	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl Phthalate	830	U
208-96-8	Acenaphthylene	830	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

EHQ42

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ42B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ42B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 20 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH: 7.3

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4000	U
83-32-9	Acenaphthene	830	U
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
132-64-9	Dibenzofuran	830	U
121-14-2	2,4-Dinitrotoluene	830	U
606-20-2	2,6-Dinitrotoluene	830	U
84-66-2	Diethylphthalate	830	U
7005-72-3	4-Chlorophenyl-phenylether	830	U
86-73-7	Fluorene	830	U
100-10-6	4-Nitroaniline	4000	U
534-52-1	4,6-Dinitro-2-Methylphenol	4000	U
86-30-6	N-Nitrosodiphenylamine (1)	830	U
101-55-3	4-Bromophenyl-phenylether	830	U
118-74-1	Hexachlorobenzene	830	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	550	J
120-12-7	Anthracene	180	J
84-74-2	Di-n-Butylphthalate	830	U
206-44-0	Fluoranthene	890	
129-00-0	Pyrene	550	J
85-68-7	Butylbenzylphthalate	830	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
56-55-3	Benzo(a)Anthracene	340	J
117-81-7	bis(2-Ethylhexyl)Phthalate	830	U
218-01-9	Chrysene	340	J
117-84-0	Di-n-Octyl Phthalate	830	U
205-99-2	Benzo(b)Fluoranthene	410	J
207-08-9	Benzo(k)Fluoranthene	610	J
50-32-8	Benzo(a)Pyrene	410	J
193-39-5	Indeno(1,2,3-cd)Pyrene	340	J
53-70-3	Dibenz(a,h)Anthracene	830	U
191-24-2	Benzo(g,h,i)Perylene	510	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ42

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.: _____

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ42B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ42B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 20 dec. _____

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.3

Dilution Factor: 1.0

Number TICs found: 14

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	4.22	500	J
2. _____	UNKNOWN	4.82	1000	J
3. _____	UNKNOWN	6.42	3000	J
4. 10544-50-0	SULFUR	24.60	2000	J
5. 10544-50-0	SULFUR	24.67	3000	J
6. _____	UNKNOWN	25.55	800	J
7. _____	UNKNOWN ALKANE	33.20	500	J
8. 205-82-3	BENZO[J]-FLUORANTHENE	33.80	400	J
9. _____	UNKNOWN	34.63	700	J
10. _____	UNKNOWN ALKANE	35.38	1000	J
11. _____	UNKNOWN	36.85	400	J
12. _____	UNKNOWN	38.05	400	J
13. _____	UNKNOWN	38.98	400	J
14. _____	UNKNOWN	39.38	500	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ43

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ43B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ43B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 17 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH: 7.5

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

108-95-2	Phenol	800	U
111-44-4	bis(2-Chloroethyl)Ether	800	U
95-57-8	2-Chlorophenol	800	U
541-73-1	1,3-Dichlorobenzene	800	U
106-46-7	1,4-Dichlorobenzene	800	U
100-51-6	Benzyl Alcohol	800	U
95-50-1	1,2-Dichlorobenzene	800	U
95-48-7	2-Methylphenol	800	U
39638-32-9	bis(2-Chloroisopropyl)Ether	800	U
106-44-5	4-Methylphenol	800	U
621-64-7	N-Nitroso-Di-n-Propylamine	800	U
67-72-1	Hexachloroethane	800	U
98-95-3	Nitrobenzene	800	U
78-59-1	Isophorone	800	U
88-75-5	2-Nitrophenol	800	U
105-67-9	2,4-Dimethylphenol	800	U
65-85-0	Benzoic Acid	3900	U
111-91-1	bis(2-Chloroethoxy)Methane	800	U
120-83-2	2,4-Dichlorophenol	800	U
120-82-1	1,2,4-Trichlorobenzene	800	U
91-20-3	Naphthalene	800	U
106-47-8	4-Chloroaniline	800	U
87-68-3	Hexachlorobutadiene	800	U
59-50-7	4-Chloro-3-Methylphenol	800	U
91-57-6	2-Methylnaphthalene	800	U
77-47-4	Hexachlorocyclopentadiene	800	U
88-06-2	2,4,6-Trichlorophenol	800	U
95-95-4	2,4,5-Trichlorophenol	3900	U
91-58-7	2-Chloronaphthalene	800	U
88-74-4	2-Nitroaniline	3900	U
131-11-3	Dimethyl Phthalate	800	U
208-96-8	Acenaphthylene	800	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ43

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ43B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ43B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 17 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH: 7.5

Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	Q
99-09-2	3-Nitroaniline	3900 U
83-32-9	Acenaphthene	800 U
51-28-5	2,4-Dinitrophenol	3900 U
100-02-7	4-Nitrophenol	3900 U
132-64-9	Dibenzofuran	800 U
121-14-2	2,4-Dinitrotoluene	800 U
606-20-2	2,6-Dinitrotoluene	800 U
84-66-2	Diethylphthalate	800 U
7005-72-3	4-Chlorophenyl-phenylether	800 U
86-73-7	Fluorene	800 U
100-10-6	4-Nitroaniline	3900 U
534-52-1	4,6-Dinitro-2-Methylphenol	3900 U
86-30-6	N-Nitrosodiphenylamine (1)	800 U
101-55-3	4-Bromophenyl-phenylether	800 U
118-74-1	Hexachlorobenzene	800 U
87-86-5	Pentachlorophenol	3900 U
85-01-8	Phenanthrene	990
120-12-7	Anthracene	190 J
84-74-2	Di-n-Butylphthalate	800 U
206-44-0	Fluoranthene	1300
129-00-0	Pyrene	790 J
85-68-7	Butylbenzylphthalate	800 U
91-94-1	3,3'-Dichlorobenzidine	1600 U
56-55-3	Benzo(a)Anthracene	490 J
117-81-7	bis(2-Ethylhexyl)Phthalate	230 J
218-01-9	Chrysene	480 J
117-84-0	Di-n-Octyl Phthalate	800 U
205-99-2	Benzo(b)Fluoranthene	900
207-08-9	Benzo(k)Fluoranthene	800 U
50-32-8	Benzo(a)Pyrene	510 J
193-39-5	Indeno(1,2,3-cd)Pyrene	420 J
53-70-3	Dibenz(a,h)Anthracene	800 U
191-24-2	Benzo(g,h,i)Perylene	530 J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ43

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ43B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ43B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 17 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.5

Dilution Factor: 1.0

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	4.25	600	J
2. _____	UNKNOWN	4.87	1000	J
3. _____	UNKNOWN	6.47	3000	J
4. _____	UNKNOWN	23.95	400	J
5. 10544-50-0	SULFUR	24.62	2000	J
6. 10544-50-0	SULFUR	24.67	2000	J
7. _____	UNKNOWN	36.88	400	J
8. _____	UNKNOWN	37.75	500	J
9. _____	UNKNOWN	38.70	400	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ44

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ44B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ44B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 19 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH: 7.4

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	810	U
111-44-4	bis(2-Chloroethyl)Ether	810	U
95-57-8	2-Chlorophenol	810	U
541-73-1	1,3-Dichlorobenzene	810	U
106-46-7	1,4-Dichlorobenzene	810	U
100-51-6	Benzyl Alcohol	810	U
95-50-1	1,2-Dichlorobenzene	810	U
95-48-7	2-Methylphenol	810	U
39638-32-9	bis(2-Chloroisopropyl)Ether	810	U
106-44-5	4-Methylphenol	810	U
621-64-7	N-Nitroso-Di-n-Propylamine	810	U
67-72-1	Hexachloroethane	810	U
98-95-3	Nitrobenzene	810	U
78-59-1	Isophorone	810	U
88-75-5	2-Nitrophenol	810	U
105-67-9	2,4-Dimethylphenol	810	U
65-85-0	Benzoic Acid	4000	U
111-91-1	bis(2-Chloroethoxy)Methane	810	U
120-83-2	2,4-Dichlorophenol	810	U
120-82-1	1,2,4-Trichlorobenzene	810	U
91-20-3	Naphthalene	810	U
106-47-8	4-Chloroaniline	810	U
87-68-3	Hexachlorobutadiene	810	U
59-50-7	4-Chloro-3-Methylphenol	810	U
91-57-6	2-Methylnaphthalene	810	U
77-47-4	Hexachlorocyclopentadiene	810	U
88-06-2	2,4,6-Trichlorophenol	810	U
95-95-4	2,4,5-Trichlorophenol	4000	U
91-58-7	2-Chloronaphthalene	810	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl Phthalate	810	U
208-96-8	Acenaphthylene	810	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ44

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ44B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ44B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 19 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH: 7.4

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2-----	3-Nitroaniline	4000	U
83-32-9-----	Acenaphthene	810	U
51-28-5-----	2,4-Dinitrophenol	4000	U
100-02-7-----	4-Nitrophenol	4000	U
132-64-9-----	Dibenzofuran	810	U
121-14-2-----	2,4-Dinitrotoluene	810	U
606-20-2-----	2,6-Dinitrotoluene	810	U
84-66-2-----	Diethylphthalate	810	U
7005-72-3-----	4-Chlorophenyl-phenylether	810	U
86-73-7-----	Fluorene	810	U
100-10-6-----	4-Nitroaniline	4000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	4000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	810	U
101-55-3-----	4-Bromophenyl-phenylether	810	U
118-74-1-----	Hexachlorobenzene	810	U
87-86-5-----	Pentachlorophenol	4000	U
85-01-8-----	Phenanthrene	1200	
120-12-7-----	Anthracene	810	U
84-74-2-----	Di-n-Butylphthalate	810	U
206-44-0-----	Fluoranthene	1600	
129-00-0-----	Pyrene	810	J
85-68-7-----	Butylbenzylphthalate	810	U
91-94-1-----	3,3'-Dichlorobenzidine	1600	U
56-55-3-----	Benzo(a)Anthracene	390	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	810	U
218-01-9-----	Chrysene	610	J
117-84-0-----	Di-n-Octyl Phthalate	810	U
205-99-2-----	Benzo(b)Fluoranthene	920	
207-08-9-----	Benzo(k)Fluoranthene	810	U
50-32-8-----	Benzo(a)Pyrene	500	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	350	J
53-70-3-----	Dibenz(a,h)Anthracene	810	U
191-24-2-----	Benzo(g,h,i)Perylene	450	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ44

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ44B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ44B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 19 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH: 7.4

Dilution Factor: 1.0

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	4.25	300	J
2. _____	UNKNOWN	4.85	1000	J
3. _____	UNKNOWN	6.45	2000	J
4. _____	TRICHLORO-1,1'-BIPHENYL ISOM	22.62	400	J
5. 10544-50-0	SULFUR	24.60	1000	J
6. 10544-50-0	SULFUR	24.67	2000	J
7. _____	UNKNOWN	34.68	400	J
8. _____	UNKNOWN	36.88	400	J
9. _____	UNKNOWN	37.63	700	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ45

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ45B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ45B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 31 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH: 7.1

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

108-95-2-----	Phenol	960	U
111-44-4-----	bis(2-Chloroethyl)Ether	960	U
95-57-8-----	2-Chlorophenol	960	U
541-73-1-----	1,3-Dichlorobenzene	960	U
106-46-7-----	1,4-Dichlorobenzene	960	U
100-51-6-----	Benzyl Alcohol	960	U
95-50-1-----	1,2-Dichlorobenzene	960	U
95-48-7-----	2-Methylphenol	960	U
39638-32-9-----	bis(2-Chloroisopropyl)Ether	960	U
106-44-5-----	4-Methylphenol	960	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	960	U
67-72-1-----	Hexachloroethane	960	U
98-95-3-----	Nitrobenzene	960	U
78-59-1-----	Isophorone	960	U
88-75-5-----	2-Nitrophenol	960	U
105-67-9-----	2,4-Dimethylphenol	960	U
65-85-0-----	Benzoic Acid	4600	U
111-91-1-----	bis(2-Chloroethoxy)Methane	960	U
120-83-2-----	2,4-Dichlorophenol	960	U
120-82-1-----	1,2,4-Trichlorobenzene	960	U
91-20-3-----	Naphthalene	960	U
106-47-8-----	4-Chloroaniline	960	U
87-68-3-----	Hexachlorobutadiene	960	U
59-50-7-----	4-Chloro-3-Methylphenol	960	U
91-57-6-----	2-Methylnaphthalene	960	U
77-47-4-----	Hexachlorocyclopentadiene	960	U
88-06-2-----	2,4,6-Trichlorophenol	960	U
95-95-4-----	2,4,5-Trichlorophenol	4600	U
91-58-7-----	2-Chloronaphthalene	960	U
88-74-4-----	2-Nitroaniline	4600	U
131-11-3-----	Dimethyl Phthalate	960	U
208-96-8-----	Acenaphthylene	960	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ45

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ45B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ45B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 31 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH: 7.1

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

99-09-2	3-Nitroaniline	4600	U
83-32-9	Acenaphthene	960	U
51-28-5	2,4-Dinitrophenol	4600	U
100-02-7	4-Nitrophenol	4600	U
132-64-9	Dibenzofuran	960	U
121-14-2	2,4-Dinitrotoluene	960	U
606-20-2	2,6-Dinitrotoluene	960	U
84-66-2	Diethylphthalate	960	U
7005-72-3	4-Chlorophenyl-phenylether	960	U
86-73-7	Fluorene	960	U
100-10-6	4-Nitroaniline	4600	U
534-52-1	4,6-Dinitro-2-Methylphenol	4600	U
86-30-6	N-Nitrosodiphenylamine (1)	960	U
101-55-3	4-Bromophenyl-phenylether	960	U
118-74-1	Hexachlorobenzene	960	U
87-86-5	Pentachlorophenol	4600	U
85-01-8	Phenanthrene	2500	
120-12-7	Anthracene	490	J
84-74-2	Di-n-Butylphthalate	960	U
206-44-0	Fluoranthene	4000	
129-00-0	Pyrene	2100	
85-68-7	Butylbenzylphthalate	960	U
91-94-1	3,3'-Dichlorobenzidine	1900	U
56-55-3	Benzo(a)Anthracene	1200	
117-81-7	bis(2-Ethylhexyl)Phthalate	240	J
218-01-9	Chrysene	1000	
117-84-0	Di-n-Octyl Phthalate	960	U
205-99-2	Benzo(b)Fluoranthene	2400	
207-08-9	Benzo(k)Fluoranthene	960	U
50-32-8	Benzo(a)Pyrene	1200	
193-39-5	Indeno(1,2,3-cd)Pyrene	1100	
53-70-3	Dibenz(a,h)Anthracene	230	J
191-24-2	Benzo(g,h,i)Perylene	1300	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ45

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ45B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ45B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 31 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.1

Dilution Factor: 1.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	4.88	3000	J
2. _____	UNKNOWN	6.45	2000	J
3. _____	UNKNOWN	23.98	3000	J
4. _____	UNKNOWN	24.03	3000	J
5. 10544-50-0	SULFUR	24.70	6000	J
6. 10544-50-0	SULFUR	24.77	5000	J
7. _____	UNKNOWN	25.93	800	J
8. _____	UNKNOWN	26.37	1000	J
9. _____	UNKNOWN PNA	27.12	500	J
10. _____	UNKNOWN PNA	27.37	500	J
11. _____	UNKNOWN ALKANE	33.25	700	J
12. 205-82-3	BENZO[J] FLUORANTHENE	34.70	1000	J
13. _____	UNKNOWN ALKANE	35.43	1000	J
14. _____	UNKNOWN	36.47	900	J
15. _____	UNKNOWN	36.90	1000	J
16. _____	UNKNOWN ALKANE	37.45	1000	J
17. _____	UNKNOWN	37.77	900	J
18. _____	UNKNOWN	38.87	900	J
19. _____	UNKNOWN ALKANE	39.37	800	J
20. _____	UNKNOWN	39.60	700	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ46

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ46B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ46B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 37 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 7.4

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1000	U
111-44-4	bis(2-Chloroethyl)Ether	1000	U
95-57-8	2-Chlorophenol	1000	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
100-51-6	Benzyl Alcohol	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U
95-48-7	2-Methylphenol	1000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	1000	U
106-44-5	4-Methylphenol	1000	U
621-64-7	N-Nitroso-Di-n-Propylamine	1000	U
67-72-1	Hexachloroethane	1000	U
98-95-3	Nitrobenzene	1000	U
78-59-1	Isophorone	1000	U
88-75-5	2-Nitrophenol	1000	U
105-67-9	2,4-Dimethylphenol	1000	U
65-85-0	Benzoic Acid	5100	U
111-91-1	bis(2-Chloroethoxy)Methane	1000	U
120-83-2	2,4-Dichlorophenol	1000	U
120-82-1	1,2,4-Trichlorobenzene	1000	U
91-20-3	Naphthalene	1000	U
106-47-8	4-Chloroaniline	1000	U
87-68-3	Hexachlorobutadiene	1000	U
59-50-7	4-Chloro-3-Methylphenol	1000	U
91-57-6	2-Methylnaphthalene	1000	U
77-47-4	Hexachlorocyclopentadiene	1000	U
88-06-2	2,4,6-Trichlorophenol	1000	U
95-95-4	2,4,5-Trichlorophenol	5100	U
91-58-7	2-Chloronaphthalene	1000	U
88-74-4	2-Nitroaniline	5100	U
131-11-3	Dimethyl Phthalate	1000	U
208-96-8	Acenaphthylene	1000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ46

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ46B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ46B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 37 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 7.4

Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	Q
99-09-2	3-Nitroaniline	5100 U
83-32-9	Acenaphthene	1000 U
51-28-5	2,4-Dinitrophenol	5100 U
100-02-7	4-Nitrophenol	5100 U
132-64-9	Dibenzofuran	1000 U
121-14-2	2,4-Dinitrotoluene	1000 U
606-20-2	2,6-Dinitrotoluene	1000 U
84-66-2	Diethylphthalate	1000 U
7005-72-3	4-Chlorophenyl-phenylether	1000 U
86-73-7	Fluorene	1000 U
100-10-6	4-Nitroaniline	5100 U
534-52-1	4,6-Dinitro-2-Methylphenol	5100 U
86-30-6	N-Nitrosodiphenylamine (1)	1000 U
101-55-3	4-Bromophenyl-phenylether	1000 U
118-74-1	Hexachlorobenzene	1000 U
87-86-5	Pentachlorophenol	5100 U
85-01-8	Phenanthrene	750 J
120-12-7	Anthracene	1000 U
84-74-2	Di-n-Butylphthalate	1000 U
206-44-0	Fluoranthene	1400
129-00-0	Pyrene	780 J
85-68-7	Butylbenzylphthalate	1000 U
91-94-1	3,3'-Dichlorobenzidine	2100 U
56-55-3	Benzo(a)Anthracene	360 J
117-81-7	bis(2-Ethylhexyl)Phthalate	240 J
218-01-9	Chrysene	690 J
117-84-0	Di-n-Octyl Phthalate	1000 U
205-99-2	Benzo(b)Fluoranthene	1000 J
207-08-9	Benzo(k)Fluoranthene	1000 U
50-32-8	Benzo(a)Pyrene	520 J
193-39-5	Indeno(1,2,3-cd)Pyrene	460 J
53-70-3	Dibenz(a,h)Anthracene	1000 U
191-24-2	Benzo(g,h,i)Perylene	530 J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ46

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ46B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ46B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 37 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.4

Dilution Factor: 1.0

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	4.92	4000	J
2. _____	UNKNOWN	6.47	3000	J
3. _____	UNKNOWN	24.68	4000	J
4. 10544-50-0	SULFUR	24.73	5000	J
5. _____	UNKNOWN	34.70	400	J
6. _____	UNKNOWN	36.93	700	J
7. _____	UNKNOWN	37.78	900	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ47

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ47B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ47B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 18 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 7.5

Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/KG

Q

108-95-2	Phenol	800	U
111-44-4	bis(2-Chloroethyl)Ether	800	U
95-57-8	2-Chlorophenol	800	U
541-73-1	1,3-Dichlorobenzene	800	U
106-46-7	1,4-Dichlorobenzene	800	U
100-51-6	Benzyl Alcohol	800	U
95-50-1	1,2-Dichlorobenzene	800	U
95-48-7	2-Methylphenol	800	U
39638-32-9	bis(2-Chloroisopropyl)Ether	800	U
106-44-5	4-Methylphenol	800	U
621-64-7	N-Nitroso-Di-n-Propylamine	800	U
67-72-1	Hexachloroethane	800	U
98-95-3	Nitrobenzene	800	U
78-59-1	Isophorone	800	U
88-75-5	2-Nitrophenol	800	U
105-67-9	2,4-Dimethylphenol	800	U
65-85-0	Benzoic Acid	3900	U
111-91-1	bis(2-Chloroethoxy)Methane	800	U
120-83-2	2,4-Dichlorophenol	800	U
120-82-1	1,2,4-Trichlorobenzene	800	U
91-20-3	Naphthalene	1800	U
106-47-8	4-Chloroaniline	800	U
87-68-3	Hexachlorobutadiene	800	U
59-50-7	4-Chloro-3-Methylphenol	800	U
91-57-6	2-Methylnaphthalene	3300	U
77-47-4	Hexachlorocyclopentadiene	800	U
88-06-2	2,4,6-Trichlorophenol	800	U
95-95-4	2,4,5-Trichlorophenol	3900	U
91-58-7	2-Chloronaphthalene	800	U
88-74-4	2-Nitroaniline	3900	U
131-11-3	Dimethyl Phthalate	800	U
208-96-8	Acenaphthylene	800	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ47

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ47B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ47B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 18 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 7.5

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2-----	3-Nitroaniline	3900	U
83-32-9-----	Acenaphthene	800	U
51-28-5-----	2,4-Dinitrophenol	3900	U
100-02-7-----	4-Nitrophenol	3900	U
132-64-9-----	Dibenzofuran	620	J
121-14-2-----	2,4-Dinitrotoluene	800	U
606-20-2-----	2,6-Dinitrotoluene	800	U
84-66-2-----	Diethylphthalate	800	U
7005-72-3-----	4-Chlorophenyl-phenylether	800	U
86-73-7-----	Fluorene	800	U
100-10-6-----	4-Nitroaniline	3900	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	3900	U
86-30-6-----	N-Nitrosodiphenylamine (1)	800	U
101-55-3-----	4-Bromophenyl-phenylether	800	U
118-74-1-----	Hexachlorobenzene	800	U
87-86-5-----	Pentachlorophenol	3900	U
85-01-8-----	Phenanthrene	1300	
120-12-7-----	Anthracene	800	U
84-74-2-----	Di-n-Butylphthalate	100	J
206-44-0-----	Fluoranthene	900	
129-00-0-----	Pyrene	380	J
85-68-7-----	Butylbenzylphthalate	800	U
91-94-1-----	3,3'-Dichlorobenzidine	1600	U
56-55-3-----	Benzo(a)Anthracene	430	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	800	U
218-01-9-----	Chrysene	420	J
117-84-0-----	Di-n-Octyl Phthalate	800	U
205-99-2-----	Benzo(b)Fluoranthene	900	
207-08-9-----	Benzo(k)Fluoranthene	800	U
50-32-8-----	Benzo(a)Pyrene	500	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	290	J
53-70-3-----	Dibenz(a,h)Anthracene	800	U
191-24-2-----	Benzo(g,h,i)Perylene	440	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ47

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ47B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ47B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 18 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

Number TICs found: 20 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	4.98	3000	J
2. _____	UNKNOWN	6.48	2000	J
3. _____	UNKNOWN ALKYL BENZENE	11.47	500	J
4. 90-12-0	1-METHYL NAPHTHALENE	13.63	2000	J
5. _____	DIMETHYL NAPHTHALENE ISOMER	15.38	1000	J
6. _____	DIMETHYL NAPHTHALENE ISOMER	15.65	3000	J
7. _____	DIMETHYL NAPHTHALENE ISOMER	15.98	1000	J
8. _____	TRIMETHYL NAPHTHALENE ISOMER	17.10	600	J
9. _____	TRIMETHYL NAPHTHALENE ISOMER	17.47	600	J
10. _____	TRIMETHYL NAPHTHALENE ISOMER	17.80	600	J
11. _____	TRIMETHYL NAPHTHALENE ISOMER	18.05	800	J
12. _____	TRIMETHYL NAPHTHALENE ISOMER	18.43	1000	J
13. _____	UNKNOWN	19.17	2000	J
14. _____	UNKNOWN	20.33	2000	J
15. _____	UNKNOWN ALKANE	20.67	1000	J
16. 10544-50-0	SULFUR	24.72	3000	J
17. _____	UNKNOWN	36.93	2000	J
18. _____	UNKNOWN	37.45	1000	J
19. _____	UNKNOWN	37.78	2000	J
20. _____	UNKNOWN	38.90	600	J

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ48

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ48B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ48B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 6 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 7.0

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	700	U
111-44-4	bis(2-Chloroethyl)Ether	700	U
95-57-8	2-Chlorophenol	700	U
541-73-1	1,3-Dichlorobenzene	700	U
106-46-7	1,4-Dichlorobenzene	700	U
100-51-6	Benzyl Alcohol	700	U
95-50-1	1,2-Dichlorobenzene	700	U
95-48-7	2-Methylphenol	700	U
39638-32-9	bis(2-Chloroisopropyl)Ether	700	U
106-44-5	4-Methylphenol	700	U
621-64-7	N-Nitroso-Di-n-Propylamine	700	U
67-72-1	Hexachloroethane	700	U
98-95-3	Nitrobenzene	700	U
78-59-1	Isophorone	700	U
88-75-5	2-Nitrophenol	700	U
105-67-9	2,4-Dimethylphenol	700	U
65-85-0	Benzoic Acid	3400	U
111-91-1	bis(2-Chloroethoxy)Methane	700	U
120-83-2	2,4-Dichlorophenol	700	U
120-82-1	1,2,4-Trichlorobenzene	700	U
91-20-3	Naphthalene	1200	
106-47-8	4-Chloroaniline	700	U
87-68-3	Hexachlorobutadiene	700	U
59-50-7	4-Chloro-3-Methylphenol	700	U
91-57-6	2-Methylnaphthalene	810	
77-47-4	Hexachlorocyclopentadiene	700	U
88-06-2	2,4,6-Trichlorophenol	700	U
95-95-4	2,4,5-Trichlorophenol	3400	U
91-58-7	2-Chloronaphthalene	700	U
88-74-4	2-Nitroaniline	3400	U
131-11-3	Dimethyl Phthalate	700	U
208-96-8	Acenaphthylene	280	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ48

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ48B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ48B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 6 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 7.0

Dilution Factor: 1.0

CAS NO. -	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2-----	3-Nitroaniline	3400	U
83-32-9-----	Acenaphthene	770	U
51-28-5-----	2,4-Dinitrophenol	3400	U
100-02-7-----	4-Nitrophenol	3400	U
132-64-9-----	Dibenzofuran	1000	U
121-14-2-----	2,4-Dinitrotoluene	700	U
606-20-2-----	2,6-Dinitrotoluene	700	U
84-66-2-----	Diethylphthalate	700	U
7005-72-3-----	4-Chlorophenyl-phenylether	700	U
86-73-7-----	Fluorene	900	U
100-10-6-----	4-Nitroaniline	3400	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	3400	U
86-30-6-----	N-Nitrosodiphenylamine (1)	700	U
101-55-3-----	4-Bromophenyl-phenylether	700	U
118-74-1-----	Hexachlorobenzene	700	U
87-86-5-----	Pentachlorophenol	3400	U
85-01-8-----	Phenanthrene	11000	U
120-12-7-----	Anthracene	1300	U
84-74-2-----	Di-n-Butylphthalate	700	U
206-44-0-----	Fluoranthene	12000	E
129-00-0-----	Pyrene	5800	U
85-68-7-----	Butylbenzylphthalate	700	U
91-94-1-----	3,3'-Dichlorobenzidine	1400	U
56-55-3-----	Benzo(a)Anthracene	3300	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	200	J
218-01-9-----	Chrysene	2700	U
117-84-0-----	Di-n-Octyl Phthalate	700	U
205-99-2-----	Benzo(b)Fluoranthene	6000	U
207-08-9-----	Benzo(k)Fluoranthene	700	U
50-32-8-----	Benzo(a)Pyrene	2800	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	2600	U
53-70-3-----	Dibenz(a,h)Anthracene	730	U
191-24-2-----	Benzo(g,h,i)Perylene	2800	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ48

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ48B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ48B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 6 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	4.28	700	J
2. _____	UNKNOWN	4.90	1000	J
3. _____	UNKNOWN	6.47	1000	J
4. 90-12-0	1-METHYL NAPHTHALENE	13.63	500	J
5. -----	DIMETHYL NAPHTHALENE ISOMER	15.63	400	J
6. 2788-23-0	9-NITROSO 9H-CARBAZOLE	22.17	1000	J
7. _____	UNKNOWN PNA	22.92	500	J
8. _____	UNKNOWN	23.20	500	J
9. _____	UNKNOWN	24.00	700	J
10. _____	UNKNOWN	25.98	1000	J
11. _____	UNKNOWN	27.12	400	J
12. _____	UNKNOWN	29.00	500	J
13. _____	UNKNOWN	29.43	800	J
14. 82-05-3	7H-BENZ[DE]ANTHRACEN-7-ONE	29.75	600	J
15. _____	UNKNOWN	30.55	600	J
16. 205-82-3	BENZO[1,2-b]FLUORANTHENE	34.78	2000	J
17. _____	UNKNOWN	35.17	2000	J
18. _____	UNKNOWN ALKANE	35.43	2000	J
19. _____	UNKNOWN ALKANE	37.45	2000	J
20. _____	UNKNOWN	39.87	2000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ48DL

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ48BDL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ48BDL

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 6 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 7.0

Dilution Factor: 2.0

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1400	U
111-44-4	bis(2-Chloroethyl)Ether	1400	U
95-57-8	2-Chlorophenol	1400	U
541-73-1	1,3-Dichlorobenzene	1400	U
106-46-7	1,4-Dichlorobenzene	1400	U
100-51-6	Benzyl Alcohol	1400	U
95-50-1	1,2-Dichlorobenzene	1400	U
95-48-7	2-Methylphenol	1400	U
39638-32-9	bis(2-Chloroisopropyl)Ether	1400	U
106-44-5	4-Methylphenol	1400	U
621-64-7	N-Nitroso-Di-n-Propylamine	1400	U
67-72-1	Hexachloroethane	1400	U
98-95-3	Nitrobenzene	1400	U
78-59-1	Isophorone	1400	U
88-75-5	2-Nitrophenol	1400	U
105-67-9	2,4-Dimethylphenol	1400	U
65-85-0	Benzoic Acid	6800	U
111-91-1	bis(2-Chloroethoxy)Methane	1400	U
120-83-2	2,4-Dichlorophenol	1400	U
120-82-1	1,2,4-Trichlorobenzene	1400	U
91-20-3	Naphthalene	1100	DJ
106-47-8	4-Chloroaniline	1400	U
87-68-3	Hexachlorobutadiene	1400	U
69-50-7	4-Chloro-3-Methylphenol	1400	U
91-57-6	2-Methylnaphthalene	740	DJ
77-47-4	Hexachlorocyclopentadiene	1400	U
88-06-2	2,4,6-Trichlorophenol	1400	U
95-95-4	2,4,5-Trichlorophenol	6800	U
91-58-7	2-Chloronaphthalene	1400	U
88-74-4	2-Nitroaniline	6800	U
131-11-3	Dimethyl Phthalate	1400	U
208-96-8	Acenaphthylene	240	DJ

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ48DL

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ48BDL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ48BDL

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 6 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 7.0

Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
99-09-2	3-Nitroaniline	6800	U	
83-32-9	Acenaphthene	730	DJ	
51-28-5	2,4-Dinitrophenol	6800	U	
100-02-7	4-Nitrophenol	6800	U	
132-64-9	Dibenzofuran	1000	DJ	
121-14-2	2,4-Dinitrotoluene	1400	U	
606-20-2	2,6-Dinitrotoluene	1400	U	
84-66-2	Diethylphthalate	1400	U	
7005-72-3	4-Chlorophenyl-phenylether	1400	U	
86-73-7	Fluorene	860	DJ	
100-10-6	4-Nitroaniline	6800	U	
534-52-1	4,6-Dinitro-2-Methylphenol	6800	U	
86-30-6	N-Nitrosodiphenylamine (1)	1400	U	
101-55-3	4-Bromophenyl-phenylether	1400	U	
118-74-1	Hexachlorobenzene	1400	U	
87-86-5	Pentachlorophenol	6800	U	
85-01-8	Phenanthrene	9800	D	
120-12-7	Anthracene	1900	D	
84-74-2	Di-n-Butylphthalate	1400	U	
206-44-0	Fluoranthene	13000	D	
129-00-0	Pyrene	6900	D	
85-68-7	Butylbenzylphthalate	1400	U	
91-94-1	3,3'-Dichlorobenzidine	2800	U	
56-55-3	Benzo(a)Anthracene	4800	D	
117-81-7	bis(2-Ethylhexyl)Phthalate	360	DJ	
218-01-9	Chrysene	3100	D	
117-84-0	Di-n-Octyl Phthalate	1400	U	
206-99-2	Benzo(b)Fluoranthene	5600	D	
207-08-9	Benzo(k)Fluoranthene	1400	U	
50-32-8	Benzo(a)Pyrene	3300	D	
193-39-5	Indeno(1,2,3-cd)Pyrene	3200	D	
53-70-3	Dibenz(a,h)Anthracene	1300	DJ	
191-24-2	Benzo(g,h,i)Perylene	3000	D	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ48DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ48BDL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ48BDL

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 6 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.0

Number TICs found: 14

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	4.85	700	J
2. _____	UNKNOWN PNA	22.97	600	J
3. _____	UNKNOWN	23.18	700	J
4. _____	UNKNOWN	23.98	1000	J
5. _____	UNKNOWN	25.97	1000	J
6. _____	UNKNOWN	28.98	900	J
7. _____	UNKNOWN	29.42	1000	J
8. _____	UNKNOWN	34.15	1000	J
9. _____	UNKNOWN	34.55	1000	J
10. 205-82-3	BENZO[J] FLUORANTHENE	34.65	3000	J
11. _____	UNKNOWN ALKANE	35.32	900	J
12. _____	UNKNOWN ALKANE	37.40	800	J
13. _____	UNKNOWN	37.88	800	J
14. _____	UNKNOWN	38.48	700	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ49

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ49B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ49B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 9 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 8.8

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	730	U
111-44-4	bis(2-Chloroethyl)Ether	730	U
95-57-8	2-Chlorophenol	730	U
541-73-1	1,3-Dichlorobenzene	730	U
106-46-7	1,4-Dichlorobenzene	730	U
100-51-6	Benzyl Alcohol	730	U
95-50-1	1,2-Dichlorobenzene	730	U
95-48-7	2-Methylphenol	730	U
39638-32-9	bis(2-Chloroisopropyl)Ether	730	U
106-44-5	4-Methylphenol	730	U
621-64-7	N-Nitroso-Di-n-Propylamine	730	U
67-72-1	Hexachloroethane	730	U
98-95-3	Nitrobenzene	730	U
78-59-1	Isophorone	730	U
88-75-5	2-Nitrophenol	730	U
105-67-9	2,4-Dimethylphenol	730	U
65-85-0	Benzoic Acid	3500	U
111-91-1	bis(2-Chloroethoxy)Methane	730	U
120-83-2	2,4-Dichlorophenol	730	U
120-82-1	1,2,4-Trichlorobenzene	730	U
91-20-3	Naphthalene	340	J
106-47-8	4-Chloroaniline	730	U
87-68-3	Hexachlorobutadiene	730	U
59-50-7	4-Chloro-3-Methylphenol	730	U
91-57-6	2-Methylnaphthalene	540	J
77-47-4	Hexachlorocyclopentadiene	730	U
88-06-2	2,4,6-Trichlorophenol	730	U
95-95-4	2,4,5-Trichlorophenol	3500	U
91-58-7	2-Chloronaphthalene	730	U
88-74-4	2-Nitroaniline	3500	U
131-11-3	Dimethyl Phthalate	730	U
208-96-8	Acenaphthylene	730	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ49

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ49B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ49B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 9 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 8.8

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

99-09-2	3-Nitroaniline	3500	U
83-32-9	Acenaphthene	730	U
51-28-5	2,4-Dinitrophenol	3500	U
100-02-7	4-Nitrophenol	3500	U
132-64-9	Dibenzofuran	730	U
121-14-2	2,4-Dinitrotoluene	730	U
606-20-2	2,6-Dinitrotoluene	730	U
84-66-2	Diethylphthalate	730	U
7005-72-3	4-Chlorophenyl-phenylether	730	U
86-73-7	Fluorene	730	U
100-10-6	4-Nitroaniline	3500	U
534-52-1	4,6-Dinitro-2-Methylphenol	3500	U
86-30-6	N-Nitrosodiphenylamine (1)	730	U
101-55-3	4-Bromophenyl-phenylether	730	U
118-74-1	Hexachlorobenzene	730	U
87-86-5	Pentachlorophenol	3500	U
85-01-8	Phenanthrene	330	J
120-12-7	Anthracene	730	U
84-74-2	Di-n-Butylphthalate	730	U
206-44-0	Fluoranthene	380	J
129-00-0	Pyrene	220	J
85-68-7	Butylbenzylphthalate	730	U
91-94-1	3,3'-Dichlorobenzidine	1500	U
56-55-3	Benzo(a)Anthracene	160	J
117-81-7	bis(2-Ethylhexyl)Phthalate	150	J
218-01-9	Chrysene	250	J
117-84-0	Di-n-Octyl Phthalate	730	U
205-99-2	Benzo(b)Fluoranthene	370	J
207-08-9	Benzo(k)Fluoranthene	730	U
50-32-8	Benzo(a)Pyrene	200	J
193-39-5	Indeno(1,2,3-cd)Pyrene	210	J
53-70-3	Dibenz(a,h)Anthracene	730	U
191-24-2	Benzo(g,h,i)Perylene	250	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ49

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ49B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ49B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 9 dec. _____

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 8.8

Dilution Factor: 1.0

Number TICs found: 17

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	4.32	900	J
2. _____	UNKNOWN	4.90	800	J
3. _____	UNKNOWN	6.48	1000	J
4. 90-12-0	1-METHYL NAPHTHALENE	13.63	400	J
5. 571-58-4	1,4-DIMETHYL NAPHTHALENE	15.65	200	J
6. _____	UNKNOWN ALKANE	17.15	200	J
7. _____	UNKNOWN ALKANE	20.33	800	J
8. _____	UNKNOWN ALKANE	21.70	300	J
9. _____	UNKNOWN ALKANE	21.82	300	J
10. _____	UNKNOWN ALKANE	23.08	400	J
11. _____	UNKNOWN ALKANE	24.47	300	J
12. 10544-50-0	SULFUR	24.70	1000	J
13. _____	UNKNOWN ALKANE	35.43	1000	J
14. _____	UNKNOWN	36.43	1000	J
15. _____	UNKNOWN ALKANE	37.47	400	J
16. _____	UNKNOWN	37.65	600	J
17. _____	UNKNOWN	37.78	500	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ50

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ50B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ50B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 20 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 8.2

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	830	U
111-44-4	bis(2-Chloroethyl)Ether	830	U
95-57-8	2-Chlorophenol	830	U
541-73-1	1,3-Dichlorobenzene	830	U
106-46-7	1,4-Dichlorobenzene	830	U
100-51-6	Benzyl Alcohol	830	U
95-50-1	1,2-Dichlorobenzene	830	U
95-48-7	2-Methylphenol	830	U
39638-32-9	bis(2-Chloroisopropyl)Ether	830	U
106-44-5	4-Methylphenol	830	U
621-64-7	N-Nitroso-Di-n-Propylamine	830	U
67-72-1	Hexachloroethane	830	U
98-95-3	Nitrobenzene	830	U
78-59-1	Isophorone	830	U
88-75-5	2-Nitrophenol	830	U
105-67-9	2,4-Dimethylphenol	830	U
65-85-0	Benzoic Acid	4000	U
111-91-1	bis(2-Chloroethoxy)Methane	830	U
120-83-2	2,4-Dichlorophenol	830	U
120-82-1	1,2,4-Trichlorobenzene	830	U
91-20-3	Naphthalene	130	J
106-47-8	4-Chloroaniline	830	U
87-68-3	Hexachlorobutadiene	830	U
59-50-7	4-Chloro-3-Methylphenol	830	U
91-57-6	2-Methylnaphthalene	160	J
77-47-4	Hexachlorocyclopentadiene	830	U
88-06-2	2,4,6-Trichlorophenol	830	U
95-95-4	2,4,5-Trichlorophenol	4000	U
91-58-7	2-Chloronaphthalene	830	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl Phthalate	830	U
208-96-8	Acenaphthylene	13	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ50

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EH42

Matrix: (soil/water) SOIL

Lab Sample ID: EH50B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EH50B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 20 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 8.2

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
99-09-2	3-Nitroaniline	4000	U	
83-32-9	Acenaphthene	64	J	
51-28-5	2,4-Dinitrophenol	4000	U	
100-02-7	4-Nitrophenol	4000	U	
132-64-9	Dibenzofuran	60	J	
121-14-2	2,4-Dinitrotoluene	830	U	
606-20-2	2,6-Dinitrotoluene	830	U	
84-66-2	Diethylphthalate	830	U	
7005-72-3	4-Chlorophenyl-phenylether	830	U	
86-73-7	Fluorene	59	J	
100-10-6	4-Nitroaniline	4000	U	
534-52-1	4,6-Dinitro-2-Methylphenol	4000	U	
86-30-6	N-Nitrosodiphenylamine (1)	830	U	
101-55-3	4-Bromophenyl-phenylether	830	U	
118-74-1	Hexachlorobenzene	830	U	
87-86-5	Pentachlorophenol	4000	U	
85-01-8	Phenanthrene	730	J	
120-12-7	Anthracene	170	J	
84-74-2	Di-n-Butylphthalate	830	U	
206-44-0	Fluoranthene	1600	E	
129-00-0	Pyrene	1100		
85-68-7	Butylbenzylphthalate	830	U	
91-94-1	3,3'-Dichlorobenzidine	1700	U	
56-55-3	Benzo(a)Anthracene	840		
117-81-7	bis(2-Ethylhexyl)Phthalate	830	U	
218-01-9	Chrysene	560	J	
117-84-0	Di-n-Octyl Phthalate	830	U	
205-99-2	Benzo(b)Fluoranthene	860		
207-08-9	Benzo(k)Fluoranthene	460	J	
50-32-8	Benzo(a)Pyrene	420	J	
193-39-5	Indeno(1,2,3-cd)Pyrene	340	J	
53-70-3	Dibenz(a,h)Anthracene	140	J	
191-24-2	Benzo(g,h,i)Perylene	440	J	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ50

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ50B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ50B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

Number TICs found: 20 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. _____	UNKNOWN	4.90	2000	J
2. _____	UNKNOWN	6.47	2000	J
3. 90-12-0	1-METHYL NAPHTHALENE	13.62	1000	J
4. _____	DIMETHYL NAPHTHALENE ISOMER	15.38	400	J
5. _____	DIMETHYL NAPHTHALENE ISOMER	15.63	1000	J
6. _____	DIMETHYL NAPHTHALENE ISOMER	15.97	600	J
7. _____	UNKNOWN PNA	22.90	600	J
8. _____	UNKNOWN	23.18	700	J
9. _____	UNKNOWN	23.98	800	J
10. _____	UNKNOWN	25.98	2000	J
11. _____	UNKNOWN PNA	27.12	700	J
12. _____	UNKNOWN PNA	29.05	800	J
13. _____	UNKNOWN PNA	29.35	500	J
14. _____	UNKNOWN	29.48	1000	J
15. 82-05-3	7H-BENZ[DE]ANTHRACEN-7-ONE	29.83	600	J
16. _____	UNKNOWN PNA	31.80	600	J
17. _____	UNKNOWN PNA	34.30	2000	J
18. _____	UNKNOWN	34.65	2000	J
19. 205-82-3	BENZO[JJ] FLUORANTHENE	34.80	6000	J
20. _____	UNKNOWN PNA	37.97	1000	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ42

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 60224

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	U
58-89-9	Lindane	20	U
76-44-8	Heptachlor	20	U
309-00-2	Aldrin	20	U
1024-57-3	Heptachlor epoxide	20	U
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	40	U
72-55-9	4,4'-DDE	40	U
72-20-8	Endrin	40	U
33213-65-9	Endosulfan II	40	U
72-54-8	4,4'-DDD	40	U
1031-07-8	Endosulfan sulfate	40	U
50-29-3	4,4'-DDT	40	U
72-43-5	Methoxychlor	200	U
53494-70-5	Endrin ketone	40	U
5103-71-9	alpha-Chlordane	200	U
5103-74-2	gamma-Chlordane	200	U
8001-35-2	Toxaphene	400	U
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	400	U
11096-82-5	Aroclor-1260	400	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ43

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 60225

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 17 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	19	U
319-85-7	beta-BHC	19	U
319-86-8	delta-BHC	19	U
58-89-9	Lindane	19	U
76-44-8	Heptachlor	19	U
309-00-2	Aldrin	19	U
1024-57-3	Heptachlor epoxide	19	U
959-98-8	Endosulfan I	19	U
60-57-1	Dieldrin	39	U
72-55-9	4,4'-DDE	39	U
72-20-8	Endrin	39	U
33213-65-9	Endosulfan II	39	U
72-54-8	4,4'-DDD	39	U
1031-07-8	Endosulfan sulfate	39	U
50-29-3	4,4'-DDT	39	U
72-43-5	Methoxychlor	190	U
53494-70-5	Endrin ketone	39	U
5103-71-9	alpha-Chlordane	190	U
5103-74-2	gamma-Chlordane	190	U
8001-35-2	Toxaphene	390	U
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	190	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	3400	X
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	390	U
11096-82-5	Aroclor-1260	390	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ44

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 60226

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 19 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	-----alpha-BHC	20	U
319-85-7	-----beta-BHC	20	U
319-86-8	-----delta-BHC	20	U
58-89-9	-----Lindane	20	U
76-44-8	-----Heptachlor	20	U
309-00-2	-----Aldrin	20	U
1024-57-3	-----Heptachlor epoxide	20	U
959-98-8	-----Endosulfan I	20	U
60-57-1	-----Dieldrin	40	U
72-55-9	-----4,4'-DDE	40	U
72-20-8	-----Endrin	40	U
33213-65-9	-----Endosulfan II	40	U
72-54-8	-----4,4'-DDD	40	U
1031-07-8	-----Endosulfan sulfate	40	U
50-29-3	-----4,4'-DDT	40	U
72-43-5	-----Methoxychlor	200	U
53494-70-5	-----Endrin ketone	40	U
5103-71-9	-----alpha-Chlordane	200	U
5103-74-2	-----gamma-Chlordane	200	U
8001-35-2	-----Toxaphene	400	U
12674-11-2	-----Aroclor-1016	200	U
11104-28-2	-----Aroclor-1221	200	U
11141-16-5	-----Aroclor-1232	200	U
53469-21-9	-----Aroclor-1242	5300	X
12672-29-6	-----Aroclor-1248	200	U
11097-69-1	-----Aroclor-1254	400	U
11096-82-5	-----Aroclor-1260	400	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ44DL

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.: _____

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: 602263

Sample wt/vol: 30.0 (g/mL) 6

Lab File ID: _____

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 19 dec. _____

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.4

Dilution Factor: 3.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	59	U
319-85-7	beta-BHC	59	U
319-86-8	delta-BHC	59	U
58-89-9	Lindane	59	U
76-44-8	Heptachlor	59	U
309-00-2	Aldrin	59	U
1024-57-3	Heptachlor epoxide	59	U
959-98-8	Endosulfan I	59	U
60-57-1	Dieldrin	120	U
72-55-9	4,4'-DDE	120	U
72-20-8	Endrin	120	U
33213-65-9	Endosulfan II	120	U
72-54-8	4,4'-DDD	120	U
1031-07-8	Endosulfan sulfate	120	U
50-29-3	4,4'-DDT	120	U
72-43-5	Methoxychlor	590	U
53494-70-5	Endrin ketone	120	U
5103-71-9	alpha-Chlordane	590	U
5103-74-2	gamma-Chlordane	590	U
8001-35-2	Toxaphene	1200	U
12674-11-2	Aroclor-1016	590	U
11104-28-2	Aroclor-1221	590	U
11141-16-5	Aroclor-1232	590	U
53469-21-9	Aroclor-1242	6200	DX
12672-29-6	Aroclor-1248	590	U
11097-69-1	Aroclor-1254	1200	U
11096-82-5	Aroclor-1260	1200	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ45

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 60227

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 31 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) <u>UG/KG</u>	<u>Q</u>
319-84-6	alpha-BHC	23	U
319-85-7	beta-BHC	23	U
319-86-8	delta-BHC	23	U
58-89-9	Lindane	23	U
76-44-8	Heptachlor	23	U
309-00-2	Aldrin	23	U
1024-57-3	Heptachlor epoxide	23	U
959-98-8	Endosulfan I	23	U
60-57-1	Dieldrin	46	U
72-55-9	4,4'-DDE	46	U
72-20-8	Endrin	46	U
33213-65-9	Endosulfan II	46	U
72-54-8	4,4'-DDD	46	U
1031-07-8	Endosulfan sulfate	46	U
50-29-3	4,4'-DDT	46	U
72-43-5	Methoxychlor	230	U
53494-70-5	Endrin ketone	46	U
5103-71-9	alpha-Chlordane	230	U
5103-74-2	gamma-Chlordane	230	U
8001-35-2	Toxaphene	460	U
12674-11-2	Aroclor-1016	230	U
11104-28-2	Aroclor-1221	230	U
11141-16-5	Aroclor-1232	230	U
53469-21-9	Aroclor-1242	6000	X
12672-29-6	Aroclor-1248	230	U
11097-69-1	Aroclor-1254	460	U
11096-82-5	Aroclor-1260	460	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ45DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 602272

Sample wt/vol: 30.0 (g/mL) g Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 31 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 2.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.

COMPOUND

Q

319-84-6-----	alpha-BHC	46	U
319-85-7-----	beta-BHC	46	U
319-86-8-----	delta-BHC	46	U
58-89-9-----	Lindane	46	U
76-44-8-----	Heptachlor	46	U
309-00-2-----	Aldrin	46	U
1024-57-3-----	Heptachlor epoxide	46	U
959-98-8-----	Endosulfan I	46	U
60-57-1-----	Dieldrin	93	U
72-55-9-----	4,4'-DDE	93	U
72-20-8-----	Endrin	93	U
33213-65-9-----	Endosulfan II	93	U
72-54-8-----	4,4'-DDD	93	U
1031-07-8-----	Endosulfan sulfate	93	U
50-29-3-----	4,4'-DDT	93	U
72-43-5-----	Methoxychlor	460	U
53494-70-5-----	Endrin ketone	93	U
5103-71-9-----	alpha-Chlordane	460	U
5103-74-2-----	gamma-Chlordane	460	U
8001-35-2-----	Toxaphene	930	U
12674-11-2-----	Aroclor-1016	460	U
11104-28-2-----	Aroclor-1221	460	U
11141-16-5-----	Aroclor-1232	460	U
53469-21-9-----	Aroclor-1242	6400	DX
12672-29-6-----	Aroclor-1248	460	U
11097-69-1-----	Aroclor-1254	930	U
11096-82-5-----	Aroclor-1260	930	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ46

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 60228

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 37 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	25	U
319-85-7	beta-BHC	25	U
319-86-8	delta-BHC	25	U
58-89-9	Lindane	25	U
76-44-8	Heptachlor	25	U
309-00-2	Aldrin	25	U
1024-57-3	Heptachlor epoxide	25	U
959-98-8	Endosulfan I	25	U
60-57-1	Dieldrin	51	U
72-55-9	4,4'-DDE	51	U
72-20-8	Endrin	51	U
33213-65-9	Endosulfan II	51	U
72-54-8	4,4'-DDD	51	U
1031-07-8	Endosulfan sulfate	51	U
50-29-3	4,4'-DDT	51	U
72-43-5	Methoxychlor	250	U
53494-70-5	Endrin ketone	51	U
5103-71-9	alpha-Chlordane	250	U
5103-74-2	gamma-Chlordane	250	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	250	U
11104-28-2	Aroclor-1221	250	U
11141-16-5	Aroclor-1232	250	U
53469-21-9	Aroclor-1242	5600	IX
12672-29-6	Aroclor-1248	250	U
11097-69-1	Aroclor-1254	510	U
11096-82-5	Aroclor-1260	510	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ46DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 602282

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 37 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/25/90

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 2.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	51	U
319-85-7	beta-BHC	51	U
319-86-8	delta-BHC	51	U
58-89-9	Lindane	51	U
76-44-8	Heptachlor	51	U
309-00-2	Aldrin	51	U
1024-57-3	Heptachlor epoxide	51	U
959-98-8	Endosulfan I	51	U
60-57-1	Dieldrin	100	U
72-55-9	4,4'-DDE	100	U
72-20-8	Endrin	100	U
33213-65-9	Endosulfan II	100	U
72-54-8	4,4'-DDD	100	U
1031-07-8	Endosulfan sulfate	100	U
50-29-3	4,4'-DDT	100	U
72-43-5	Methoxychlor	510	U
53494-70-5	Endrin ketone	100	U
5103-71-9	alpha-Chlordane	510	U
5103-74-2	gamma-Chlordane	510	U
8001-35-2	Toxaphene	1000	U
12674-11-2	Aroclor-1016	510	U
11104-28-2	Aroclor-1221	510	U
11141-16-5	Aroclor-1232	510	U
53469-21-9	Aroclor-1242	6300	DX
12672-29-6	Aroclor-1248	510	U
11097-69-1	Aroclor-1254	1000	U
11096-82-5	Aroclor-1260	1000	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ47

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 60229

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 18 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	U
58-89-9	Lindane	20	U
76-44-8	Heptachlor	20	U
309-00-2	Aldrin	20	U
1024-57-3	Heptachlor epoxide	20	U
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	39	U
72-55-9	4,4'-DDE	39	U
72-20-8	Endrin	39	U
33213-65-9	Endosulfan II	39	U
72-54-8	4,4'-DDD	39	U
1031-07-8	Endosulfan sulfate	39	U
50-29-3	4,4'-DDT	39	U
72-43-5	Methoxychlor	200	U
53494-70-5	Endrin ketone	39	U
5103-71-9	alpha-Chlordane	200	U
5103-74-2	gamma-Chlordane	200	U
8001-35-2	Toxaphene	390	U
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	390	U
11096-82-5	Aroclor-1260	1200	X

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ47DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 602292

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 18 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/25/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 2.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	Q
319-84-6	alpha-BHC	39 IU
319-85-7	beta-BHC	39 IU
319-86-8	delta-BHC	39 IU
58-89-9	Lindane	39 IU
76-44-8	Heptachlor	39 IU
309-00-2	Aldrin	39 IU
1024-57-3	Heptachlor epoxide	39 IU
959-98-8	Endosulfan I	39 IU
60-57-1	Dieldrin	78 IU
72-55-9	4,4'-DDE	78 IU
72-20-8	Endrin	78 IU
33213-65-9	Endosulfan II	78 IU
72-54-8	4,4'-DDD	78 IU
1031-07-8	Endosulfan sulfate	78 IU
50-29-3	4,4'-DDT	78 IU
72-43-5	Methoxychlor	390 IU
53494-70-5	Endrin ketone	78 IU
5103-71-9	alpha-Chlordane	390 IU
5103-74-2	gamma-Chlordane	390 IU
8001-35-2	Toxaphene	780 IU
12674-11-2	Aroclor-1016	390 IU
11104-28-2	Aroclor-1221	390 IU
11141-16-5	Aroclor-1232	390 IU
53469-21-9	Aroclor-1242	390 IU
12672-29-6	Aroclor-1248	390 IU
11097-69-1	Aroclor-1254	780 IU
11096-82-5	Aroclor-1260	910 DX

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ48

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 60230

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 6 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	17	U
319-85-7	beta-BHC	17	U
319-86-8	delta-BHC	17	U
58-89-9	Lindane	17	U
76-44-8	Heptachlor	17	U
309-00-2	Aldrin	17	U
1024-57-3	Heptachlor epoxide	140	
959-98-8	Endosulfan I	17	U
60-57-1	Dieldrin	34	U
72-55-9	4,4'-DDE	34	U
72-20-8	Endrin	34	U
33213-65-9	Endosulfan II	34	U
72-54-8	4,4'-DDD	34	U
1031-07-8	Endosulfan sulfate	34	U
50-29-3	4,4'-DDT	34	U
72-43-5	Methoxychlor	170	U
53494-70-5	Endrin ketone	34	U
5103-71-9	alpha-Chlordane	170	U
5103-74-2	gamma-Chlordane	170	U
8001-35-2	Toxaphene	340	U
12674-11-2	Aroclor-1016	170	U
11104-28-2	Aroclor-1221	170	U
11141-16-5	Aroclor-1232	170	U
53469-21-9	Aroclor-1242	170	U
12672-29-6	Aroclor-1248	170	U
11097-69-1	Aroclor-1254	340	U
11096-82-5	Aroclor-1260	2600	X

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ48DL

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.: _____

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: 602304

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: _____

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 6 dec. _____

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/25/90

GPC Cleanup: (Y/N) Y pH: 7.0

Dilution Factor: 4.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	68	U
319-85-7	beta-BHC	68	U
319-86-8	delta-BHC	68	U
58-89-9	Lindane	68	U
76-44-8	Heptachlor	68	U
309-00-2	Aldrin	68	U
1024-57-3	Heptachlor epoxide	180	DX
959-98-8	Endosulfan I	68	U
60-57-1	Dieldrin	140	U
72-55-9	4,4'-DDE	140	U
72-20-8	Endrin	140	U
33213-65-9	Endosulfan II	140	U
72-54-8	4,4'-DDD	140	U
1031-07-8	Endosulfan sulfate	140	U
50-29-3	4,4'-DDT	140	U
72-43-5	Methoxychlor	680	U
53494-70-5	Endrin ketone	140	U
5103-71-9	alpha-Chlordane	680	U
5103-74-2	gamma-Chlordane	680	U
8001-35-2	Toxaphene	1400	U
12674-11-2	Aroclor-1016	680	U
11104-28-2	Aroclor-1221	680	U
11141-16-5	Aroclor-1232	680	U
53469-21-9	Aroclor-1242	680	U
12672-29-6	Aroclor-1248	680	U
11097-69-1	Aroclor-1254	1400	U
11096-82-5	Aroclor-1260	2400	DX

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ49

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 60231

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 9 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 8.8 Dilution Factor: 1.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	18	U
319-85-7	beta-BHC	18	U
319-86-8	delta-BHC	18	U
58-89-9	Lindane	18	U
76-44-8	Heptachlor	18	U
309-00-2	Aldrin	18	U
1024-57-3	Heptachlor epoxide	18	U
959-98-8	Endosulfan I	18	U
60-57-1	Dieldrin	35	U
72-55-9	4,4'-DDE	35	U
72-20-8	Endrin	35	U
33213-65-9	Endosulfan II	35	U
72-54-8	4,4'-DDD	35	U
1031-07-8	Endosulfan sulfate	35	U
50-29-3	4,4'-DDT	35	U
72-43-5	Methoxychlor	180	U
53494-70-5	Endrin ketone	35	U
5103-71-9	alpha-Chlordane	180	U
5103-74-2	gamma-Chlordane	180	U
8001-35-2	Toxaphene	350	U
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	350	U
11096-82-5	Aroclor-1260	350	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ49DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 602312

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 9 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/25/90

GPC Cleanup: (Y/N) Y pH: 8.8 Dilution Factor: 2.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	35	U
319-85-7	beta-BHC	35	U
319-86-8	delta-BHC	35	U
58-89-9	Lindane	35	U
76-44-8	Heptachlor	35	U
309-00-2	Aldrin	35	U
1024-57-3	Heptachlor epoxide	35	U
959-98-8	Endosulfan I	35	U
60-57-1	Dieldrin	70	U
72-55-9	4,4'-DDE	70	U
72-20-8	Endrin	70	U
33213-65-9	Endosulfan II	70	U
72-54-8	4,4'-DDD	70	U
1031-07-8	Endosulfan sulfate	70	U
50-29-3	4,4'-DDT	70	U
72-43-5	Methoxychlor	350	U
53494-70-5	Endrin ketone	70	U
5103-71-9	alpha-Chlordane	350	U
5103-74-2	gamma-Chlordane	350	U
8001-35-2	Toxaphene	700	U
12674-11-2	Aroclor-1016	350	U
11104-28-2	Aroclor-1221	350	U
11141-16-5	Aroclor-1232	350	U
53469-21-9	Aroclor-1242	350	U
12672-29-6	Aroclor-1248	350	U
11097-69-1	Aroclor-1254	700	U
11096-82-5	Aroclor-1260	700	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ50

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 602322

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 dec. _____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/25/90

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 2.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

319-84-6	alpha-BHC	40	U
319-85-7	beta-BHC	40	U
319-86-8	delta-BHC	40	U
58-89-9	Lindane	40	U
76-44-8	Heptachlor	40	U
309-00-2	Aldrin	40	U
1024-57-3	Heptachlor epoxide	40	U
959-98-8	Endosulfan I	40	U
60-57-1	Dieldrin	80	U
72-55-9	4,4'-DDE	71	U
72-20-8	Endrin	80	U
33213-65-9	Endosulfan II	80	U
72-54-8	4,4'-DDD	80	U
1031-07-8	Endosulfan sulfate	80	U
50-29-3	4,4'-DDT	80	U
72-43-5	Methoxychlor	400	U
53494-70-5	Endrin ketone	80	U
5103-71-9	alpha-Chlordane	400	U
5103-74-2	gamma-Chlordane	400	U
8001-35-2	Toxaphene	800	U
12674-11-2	Aroclor-1016	400	U
11104-28-2	Aroclor-1221	400	U
11141-16-5	Aroclor-1232	400	U
53469-21-9	Aroclor-1242	400	U
12672-29-6	Aroclor-1248	400	U
11097-69-1	Aroclor-1254	800	U
11096-82-5	Aroclor-1260	800	U

PPG Industries, Inc. 760 Pittsburgh Drive Delaware, Ohio 43015 (614) 363-9610

Coatings and Resins

March 1, 1985

Mr. Bob Corbett
Mansfield Products
246 East Fourth Street
Mansfield, Ohio 44902

Dear Bob:

Below are the solvent percentages (by weight) as supplied to you for the products you used in 1984.

HIGH SOLIDS

	<u>AG452W1519</u> <u>(White)</u>	<u>AG452D1520</u> <u>(Almond)</u>	<u>AG452Y1523</u> <u>(Harvest)</u>	<u>AG452C1521</u> <u>(Coffee)</u>	<u>AG452A1522</u> <u>(Avocado)</u>
Xylol	62.3	62.1	52.8	58.7	51.5
Toluol	6.8	5.1	7.3	6.1	7.2
Butanol	10.4	9.3	15.9	----	15.7
Isopropanol	1.7	1.6	1.2	1.1	1.2
Solvesso 100	9.7	8.9	8.5	2.4	15.1
Isopar E	2.4	3.2	3.7	2.2	2.5
Heptane	5.7	7.4	8.6	5.2	5.7
Espesol 286	0.2	----	----	0.2	0.2
Butyl Acetate	0.5	0.7	0.8	0.5	0.5
PM Acetate	----	1.1	0.5	----	----
Diacetone Alcohol	----	----	----	23.2	----
Misc. Solvents	0.3	0.6	0.7	0.4	0.4
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

DURACRON

	AG129W1 (101.21) (White)	AG129D1047 (Almond)	AG129H1045 (Harvest)	AG129C1048 (Coffee)	AG129A1046 (Avocado)
Xylol	38.2	38.4	32.4	28.3	33.2
Toluol	35.6	36.8	39.0	40.7	41.5
Butanol	5.7	6.0	6.6	11.8	7.0
Isobutanol	4.0	1.3	7.2	2.2	6.2
Solvesso 100	8.9	11.7	8.7	9.5	9.4
Cellosolve Acetate	0.2	0.2	0.3	0.3	0.3
Butyl Carbitol	4.9	3.4	3.5	3.4	----
MEK	2.4	2.1	2.2	3.7	2.3
Misc. Solvents	0.1	0.1	0.1	0.1	0.1
	100.0	100.0	100.0	100.0	100.0

WATER REDUCIBLE PRIMER

	AG158G1281 (Gray W/R)
Water	73.3
Dimethyl Ethanol Amine	2.0
Butyl Carbitol	4.8
Butanol	3.3
Methyl Carbitol	4.8
Texanol	1.0
Butyl Cellosolve	1.5

Gray W/R Cont:

2-ethyl hexanol	8.2
Pine Oil	1.0
Misc. Solvents	0.1
	100.0

Mansfield Products Company
March 1, 1985
Page Three

Please be reminded that the above solvent information is considered proprietary and should not be disclosed to any third parties other than the EPA.

If you have any questions, feel free to call.

Sincerely,

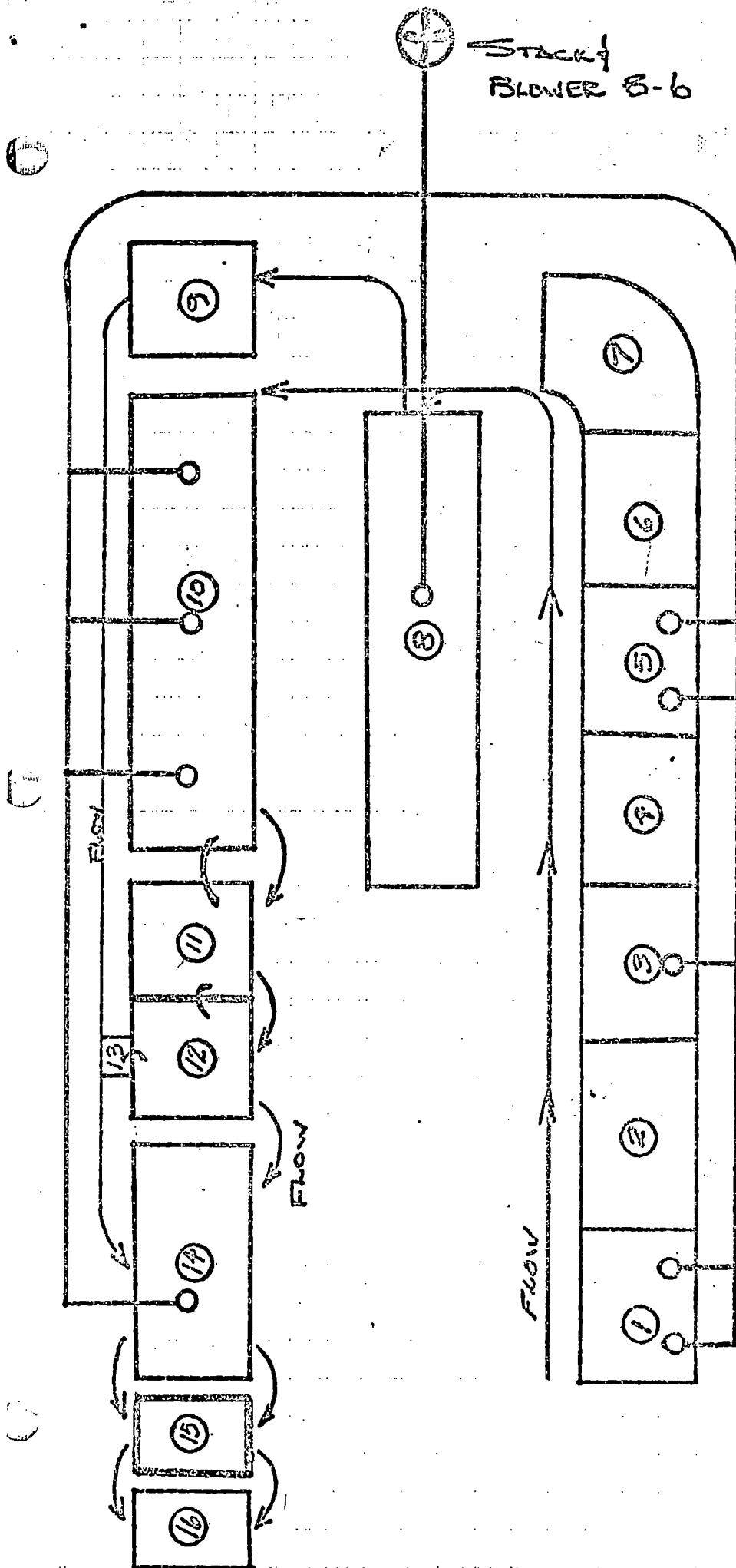
Michael L. Sproule
Technical Manager - Appliance Finishes
MLS/kar

cc: R. G. Douds
G. L. Rucker
D. L. Roberts
P. L. Wyche
M. A. Clark

STACK
BLOWER 8-6

- KEY -

- ① ELECTRO CLEAN
PENWALT K 4
- ② HOT WATER RINSE
- ③ SULFURIC ACID (H_2SO_4)
- ④ COLD WATER RINSE
- ⑤ ELECTRO CLEAN PENWALT K 4
- ⑥ HOT WATER RINSE
- ⑦ COLD WATER RINSE
- ⑧ WATER DULL NICKLE
PLATE
- ⑨ COLD WATER RINSE
- ⑩ TIN PLATE - POTASSIUM
STANNATE (ALKALINE)
- ⑪ TIN SOLUTION RECOVERY
- ⑫ TIN SOLUTION RECOVERY
- ⑬ FEED WATER RECOVERY
- ⑭ HOT WATER RINSE
- ⑮ HOT WATER RINSE
- ⑯ DRYER - STEAM FED



PROCESS No. 4
DEPT B-14
NICKLE OR TIN PLATE
RACK PROCESS
CLEANING & PICKLING

Permit No. 03/70/01/0182
 Source No. 51044

DATA SHEET

STACKS AND OTHER EGRESS POINTS

Facility Name WESTINGHOUSE ELECTRIC CORP. Person to Contact M. L. EMMENS

Facility Address 246 East Fourth Street Mailing Address Same

MANSFIELD Street 44902
City, Village or Township RICHLAND County Zip

City State Zip
 Telephone 419 - 755-6232
Area Code Number

Type: ☒ Round ☐ Rectangular - top inside dimension(s) (L & W or Diam.) 40" DIA.

Height: Above roof 6 ft. Above ground 42 ft.

Exit gas: Temp. 80 °F. Volume 16,000 ACFM Velocity 1825 feet per minute

Continuous monitoring equipment: ☐ Yes ☒ No. If yes, indicate: Type _____

Manufacturer _____ Make or model _____ Pollutant _____

Draw a flow diagram in plan view of the source equipment, control equipment and stacks. If more than one source or control device discharges into this stack show all connections.

STACK B6	
PROCESS #4	DEPT. C-14

Important Note: If emissions from the above stack have been determined by performance testing or other means, include such data and supporting calculations with this data sheet.

APPLICATION FOR PERMIT
PROCESS
 Permit No. / /
 License No. /

Facility Name WESTINGHOUSE ELECTRIC CORP. Person to Contact M. TIDMORE

Facility Address 246 East Fourth Street Mailing Address Same

MANSFIELD RICHLAND 44902

City, Village or Township County Zip City State Zip

Telephone 419 - 755-6232 Area Code Number

This application is submitted for:

Permit to operate an existing source

☐ Permit to construct a new source or modify an existing source☒ Variance from regulation(s) EP-11-11 for 12 months

Check-list of information to accompany this application:

☐ Plans and drawings☐ Emission tests or calculations☒ Process flow diagram☐ Compliance time schedule☐ Construction schedule☐ Additional informationName of process CLEAN - ETCH - NICKLE OR TIN PLATEYear installed 1940Product of this process PLATED COMPONENTS - RANGE & LAUNDRYProcess equipment TANKSYour identification Manufacturer F. B. STEVENSMake or model Capacities (lbs/hr): Rated 160 Maximum 250

OPERATING INFORMATION

Normal operating schedule: hrs/day 8 days/wk 5 wks/yr 49Percent annual production (finished units) by season: Winter 25 Spring 25 Summer 25 Fall 25Hourly production rates (lbs): Average 160 Maximum 250Annual production (indicate units) 322,650Projected percent annual increase in production 7%Method of exhaust ventilation: ☒ Stack ☐ Window fan ☐ Roof vent ☐ Other, describe Type of process: ☐ Continuous ☒ BatchIf batch, minutes per cycle 30 minutes between cycles 20Does process involve any of the following (check all applicable)? ☐ Lead ☐ Asbestos ☐ Beryllium ☐ Mercury

Materials used in process (include organic materials):

List of Raw Materials	Principal Use	Amount (lbs./hr.)
PENNWALT CLEANER K4	CLEANING	2.5
SULFURIC ACID	ETCH - DERUST - PH CONTROL	0.93
POTASSIUM STANNATE	TIN PLATE	0.21
POTASSIUM HYDROXIDE	TIN PLATE	0.92
HYDROGEN PEROXIDE	TIN PLATE	1.6
NICKLE SULFATE	NICKLE PLATE	0.13
NICKLE CHLORIDE	NICKLE PLATE	0.06
BORIC ACID	NICKLE PLATE	0.02
UDYLITE BRIGHTENER NO. 22	NICKLE PLATE	0.05

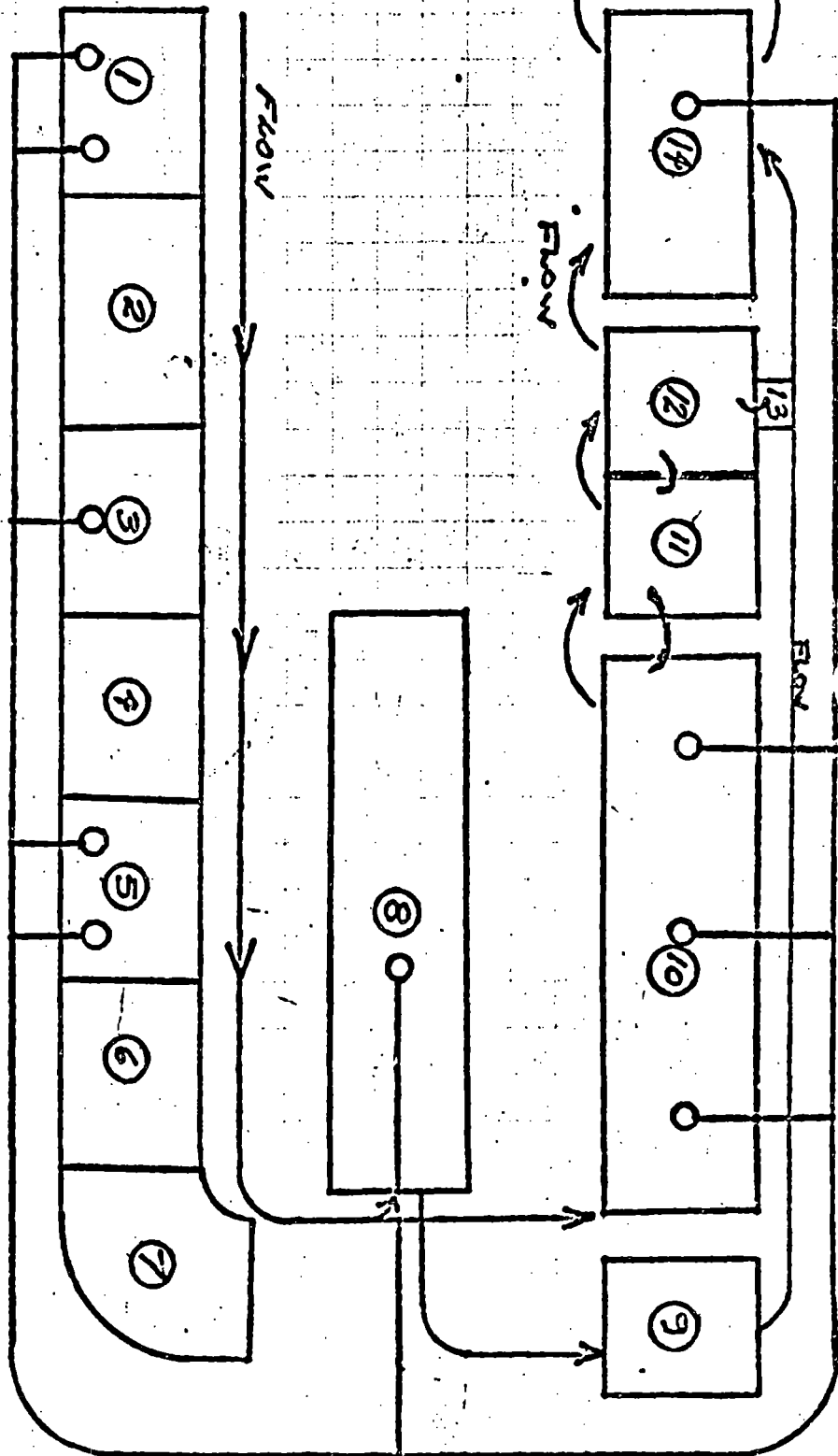
This application must include a detailed process flow diagram. Show entry and exit points of all raw materials, intermediate products, by-products and finished products. Label all materials including airborne contaminants and other waste materials.

Important Note: If emissions from this source have been determined by source tests, material balances or emission factors, include such data and supporting calculations with application.

- Key -

Stack
Blower 8-6

- ① Electro Clean Penivolt K4
- ② Hot Water Rinse
- ③ Sulfuric Acid (H_2SO_4)
- ④ Cold Water Rinse
- ⑤ Electro Clean Penivolt K4
- ⑥ Hot Water Rinse
- ⑦ Cold Water Rinse
- ⑧ Water Dull Nickel
- ⑨ Plate
- ⑩ Cold Water Rinse
- ⑪ Tin Plate - Potassium
- ⑫ Stannite (Alkaline)
- ⑬ Tin Solution Recovery
- ⑭ Tin Solution Recovery
- ⑮ Feed Water Recovery
- ⑯ Hot Water Rinse
- ⑰ Hot Water Rinse
- ⑱ Dryer - Steam Fed



Process No. 4

DEPT B-14

Nickel or Tin Plate

Back Process

CLEANING & PICKLING

- VARIANCE PERMIT COMPLIANCE TIME SCHEDULE -

The following COMPLIANCE TIME SCHEDULE is a part of the permit application for:

Company I.D. *: PROCESS #4
Description *: NICKEL OR TIN PLATE

*Note: These must be identical to those on the PACN.
(describe source equipment)

Located at the:

Facility Name: WESTINGHOUSE ELECTRIC CORP.	Person to Contact:
246 East Fourth Street	M. W. Tidmore, Manager
Facility Address: Mansfield, Ohio 44902	PLANT ENGINEERING

This Time Schedule applies to compliance with Regulation(s) EP-11-11

(indicates facility name and location)

Indicated below are the steps, or milestones, which will be taken by the above air contaminant source and the time required (in months) to complete each step as well as the time required for the total program. This COMPLIANCE TIME SCHEDULE will become a condition of the variance permit upon approval.

ESTONE		Beginning Date	Accumulative Period MONTHS	DATE
<u>1</u>	Submission of final control plans to Ohio EPA for source	<u>6/30/74</u>	<u>2</u>	<u>9/1/74</u>
<u>2</u>	Awarding of contracts for emission control system or issuing of purchase orders for component parts to accomplish emission control or process modification		<u>5</u>	<u>12/1/74</u>
<u>3</u>	Initiation of on-site construction or installation of emission control equipment or process modification		<u>7</u>	<u>2/1/75</u>
<u>4</u>	Completion of on-site construction or installation of emission control equipment or process modification		<u>10</u>	<u>5/1/75</u>
<u>5</u>	Achievement of final compliance with all applicable State and Federal rules and regulations		<u>12</u>	<u>7/1/75</u>

101A

Description of Compliance Program: (Refer to all pollutants to be controlled)

BRIEFING MEMO

1. Company Name White-Westinghouse Corp. 3. Application No. OH 0004600
 2. Company Address 246 East Fourth Street SIC No. 3631, 3633
Mansfield, Ohio 44902 District Northwest (Richland County)

Description of Operation

4. Products Made Ranges, Clothes Washers, Clothes Dryers
 4.a. Raw Materials Steel
 5. Daily Production Rate 1,295 Ranges; 2,120 Laundry Equipment
 5.a. Raw Material Consumption NA
 6. Processes Used Nickel, Chromium Plating (Non-Cyanide, 15672 sq. ft. plated)
 7. Waste Volume NA

8. Treatment System Used	<u>Chemical Treatment,</u>	<u>None</u>	<u>None</u>
	<u>Clarification</u>		
9. (Process/cooling) Outfalls (No. 001, etc)	<u>001 - Process</u>	<u>002 - Process</u>	<u>003 - Process</u>
10. Outfall Volumes (MGD)	<u>0.513</u>	<u>0.900</u>	<u>0.026</u>
11. Receiving Stream	<u>Rocky Fork</u>	<u>Rocky Fork</u>	<u>Rocky Fork</u>

 12. Critical flow of above 0.60 cfs
 12.a. Stream Classification ☒ Primary contact, warm fishery, public, industrial
 and agricultural water supplies. ☐ Cold Fishery. ☐ Variance _____
 13. Subsequent Network Mohican River, Walhonding River, Muskingum River, Ohio River
 14. No. of employees 3,200 Hours per day 16 shifts/wk 10
 wks/yr. 50

Regulatory Bases (Check where applicable)

15. In 303 Basin No Outside 303 Basin Yes
 WQ Segment Yes EL Segment No
 Mahoning No ORSANCO No
 I.J.C. No Other No

Federal Guideline Used Electroplating (Proposed 4/24/75)

A fact sheet is necessary when the outfall volume exceeds .5 mgd for any day of the year. ☒ Necessary ☐ not necessary

8. Treatment System Used	None	None	None
9. (Process/cooling) Outfalls (No. 001, etc)	004 - Process	005 - Process	006 - Storm
10. Outfall Volumes (MGD)	0.008	0.024	--
11. Receiving Stream	Rocky Fork	Rocky Fork	Rocky Fork

8. Treatment System Used	None	None	None
9. (Process/cooling) Outfalls (No. 001, etc)	007 - Storm	008 - Storm	009 - Storm
10. Outfall Volumes (MGD)	--	--	--
11. Receiving Stream	Rocky Fork	Rocky Fork	Rocky Fork

PERFORMANCE EVALUATION REPORT

DATE: 07/09/86

DMR-2A STUDY NUMBER 006

PERMITTEE: OH0004600

MANSFIELD PRODUCTS COMPANY

CX OH0002852

ANALYTES	V P	REPORT VALUE	TRUE VALUE*	ACCEPTANCE LIMITS	WARNING LIMITS	PERFORMANCE EVALUATION
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TRACE METALS IN MICROGRAMS PER LITER:

CHROMIUM		620	686	534.- 826.	571.- 790.	ACCEPTABLE
COPPER		765	749	657.- 830.	679.- 809.	ACCEPTABLE
NICKEL		922	911	791.-1030.	821.-1000.	ACCEPTABLE

MISCELLANEOUS ANALYTES:

PH-UNITS		4.50	4.50	4.38- 4.59	4.41- 4.56	ACCEPTABLE
TOTAL SUSPENDED SOLIDS (IN MG/L)		66.0	65.2	50.8- 69.2	53.1- 66.9	ACCEPTABLE

ADDITIONAL MISCELLANEOUS ANALYTES:

TOTAL CYANIDE (IN MG/L)		0.656	0.600	.343- .807	.401- .748	ACCEPTABLE
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* BASED UPON THEORETICAL CALCULATIONS, OR A REFERENCE VALUE WHEN NECESSARY.

7. List of Applicable Source(s) Involved in the Draft Variance Program and their Associated Emission Data:

<u>OEPA Source No.</u>	<u>Source Description</u>	<u>Type of Source (Variance or Offset)</u>	<u>(a) Actual Emission Rate lbs/hr, tons/yr</u>	<u>(b) Current SIP Limitation lbs/hr, tons/yr</u>	<u>(c) More Stringent of (a) and (b) lbs/hr, tons/yr</u>	<u>(d) Committed Variance/Offset lbs/hr, tons/yr</u>	<u>(e) Variance Source (d) - (c) lbs/hr, tons/yr</u>	<u>(f) Offset Source (d) - (c) lbs/hr, tons/yr</u>
K002	2nd Floor	Offset	12.9 tons/yr	14.3 tons/yr	12.9 tons/yr	16.9 tons/yr *		4.0 tons/yr
	Primer		41.0 Kg/day	45.4 Kg/day	41.0 Kg/day	53.7 Kg/day		12.7 Kg/day
	Flowcoat							
K003	3rd Floor	Variance	7.5 tons/yr	5.2 tons/yr	5.2 tons/yr	7.5 tons/yr	2.3 tons/yr	
	Electrostatic		23.8 Kg/day	16.5 Kg/day	16.5 Kg/day	23.8 Kg/day	7.3 Kg/day	
	Spray							
K002/ K005	Coating Lines	Total	20.4 tons/yr 64.8 Kg/day	19.5 tons/yr 61.9 Kg/day	18.1 tons/yr 57.5 Kg/day	24.4 tons/yr 77.5 Kg/day		
TOTALS							2.3 tons/yr	4.0 tons/yr

* - Includes transfer efficiency credit

Offset Ratio $\left\{ \frac{f}{e} \right\} = 1.7$

RACT Equivalence Calculations for Sources K002 and K005
at Mansfield Products Company, Mansfield, Ohio (1)

Source	VOC content (lb/gal-water) (a)	Percent Solids (b)	Percent Solvent (c)	Percent Water (d)	Gals. of Coating Consumed (e)	Lb VOC/Gal Solids (f)		Gal Solids consumed (g)	Tons VOC Emitted (h)	
						Without TE Credit	With TE Credit		without TE Credit	with TE Credit
<u>Actual Emission</u>										
K002	2.62	27.8	15.0	57.2	23,014	4.03	-	6,398	12.9	-
K005	3.45	53.0	47.0	-0-	4,346	6.51	-	2,303	<u>7.5</u>	-
Total									20.4	
<u>Allowable Emissions</u>										
K002	2.80/3.43 (2)					4.47	5.28	6,398	14.3	16.9
K005	2.80 (3)					4.52	-	2,303	<u>5.2</u>	<u>5.2</u>
Total									19.5	22.1

Notes

- (1) See step-by-step calculations following this table.
- (2) Second figure is the equivalent emission limit based on an 85% transfer efficiency for a flowcoating operation.
- (3) RACT emission limit based on 60% transfer efficiency for hand-held electrostatic spray guns.

MANSFIELD PRODUCTS COMPANY
INDUSTRIAL WASTE TREATMENT PLANT
DIVISION OF WHITE-WESTINGHOUSE CORPORATION
BASIC DESIGN DATA

Waste Treatment Process

Treatment consists of batch reduction of chromic rinse waste. Reduced chromic rinse waste and all acid-alkali waste streams and rinses are equalized, precipitated by lime-polymer coagulation for the removal of suspended solids, phosphates and metallic hydroxides followed by final pH adjustment. Solids are removed from the clarifiers to a sludge well followed by vacuum filtration for dewatering prior to ultimate disposal in a landfill.

Design Flow

Average - gpm	0.612 mgd
Peak - gpm	1.224 mgd

Treatment Units

1. Batch Tanks

Chrome Tank (Existing)

Number	1
Volume - Gallons	7,300
Mixer - Number and Size	1 @ 7.5 hp

Acid Tank (Existing)

Number	1
Volume - Gallons	10,700

Pumps (Existing)

Number	2
Capacity, each, gpm	30
Hp, each	3

2. Surge-Mix Tank (Existing)

Number	1
Volume - Gallons	12,100
Mixer - Number and Size	1 @ 10 hp

3. Equalization Tank Influent Pumps (Existing)	
Number	3
Capacity, each, gpm	425
Hp, each	15
4. Equalization Tank (Existing Stand-by Flocculation Clarifier)	
Number	1
Volume - Gallons	122,230
Provide protective coating on existing steel tank and clarifier mechanism and air mixing of tank contents.	
5. Clarifier Influent Pumps	
Number	2
Capacity, each, gpm	425
Hp, each	15
6. Flocculation - Clarifier (Existing)	
Number	2
Dimensions - Feet	
Tank	
Diameter	40
SWD	13
Reaction Zone	
Diameter	12
W.D.	11
Flocculation Zone	
Diameter	16
W.D.	10
Surface Area, sq ft, each	1,056
Surface Rate, gpm/sq ft	
@ 425 gpm, avg flow	0.4
@ 850 gpm, peak flow	0.8
Volume, cu ft, each	
Reaction Flocculation Zone	15,035
Clarification	122,230
Detention Time, Hrs, @ 425 gpm avg flow	
Reaction Flocculation Zone	0.6
Clarification	4.8
7. Final pH Adjustment Tank	
Number	1
Volume - Gallons	4,500
Detention Time, Min, @ 425 gpm	10
8. Effluent Parshall Flume (Existing)	
Throat Width, inches	6
Flow Range, gpm	
Minimum	21
Maximum	1,750

8. Sludge Handling (Existing)

Sludge Well	
Number	1
Volume - Gallons	3,600
Sludge Pumps	
Number	2
Capacity, each, gpm	30
Hp, each	2
Vacuum Filters	
Number	1
Diameter - Feet	6
Face Width - Feet	6
Filter Area - Sq Ft	112
Filter Loading, gph/sq ft	13
Operating Time, hrs	24
Filter Feed Capacity @ 0.75%	
lb/day	2,200
gpd	35,000

Note: Precoat vacuum filter operation complete with precoat mix tank and slurry pump.

9. Chemical Feed (Existing)

Lime Feed Range 12.5-250 lb/hr

Lime feed system consists of bag loading hopper, volumetric feeder, dissolving tank with mixer, lime slurry pump, and proportioning weir tank.

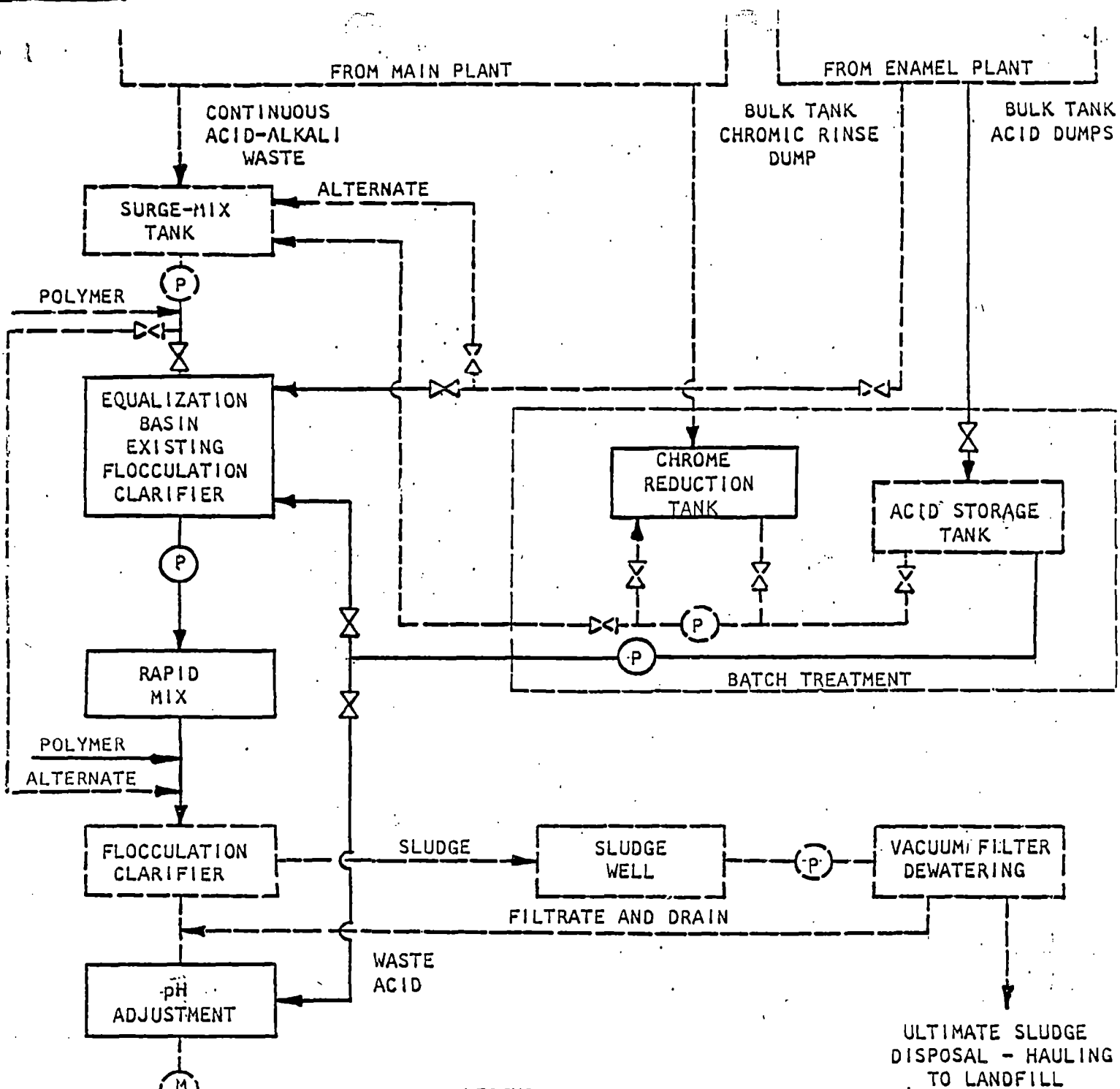
Polymer Feed Capacity, Max @ 1% feed solution

3 lb/hr

Polymer feed system consists of a 200-gallon combined aging and feed tank and a 36-gph variable speed feed pump.

10. Chemical Feed

Add acid feed pumps for final pH adjustment and flow equalization tank pH adjustment.



LEGEND

- PROPOSED FACILITIES
- EXISTING FACILITIES
- PROPOSED PIPING
- EXISTING PIPING
- P PUMP
- M METER

MANSFIELD PRODUCTS COMPANY		
DIVISION OF WHITE-WESTINGHOUSE CORP. INDUSTRIAL WASTEWATER TREATMENT PLANT PROPOSED PLANT FLOW DIAGRAM		
FLOYD G. BROWNE AND ASSOCIATES, LIMITED CONSULTING ENGINEER-PLANNER MARION, OHIO		
DATE	JOB NO.	DRAWN
SCALE	DWG. NO.	TRACED
		CHECKED

PPG Industries, Inc. 760 Pittsburgh Drive Delaware, Ohio 43015 (614) 363-9610

Coatings and Resins

March 1, 1985

Mr. Bob Corbett
Mansfield Products
246 East Fourth Street
Mansfield, Ohio 44902

Dear Bob:

Below are the solvent percentages (by weight) as supplied to you for the products you used in 1984.

HIGH SOLIDS

	<u>AG452W1519</u> <u>(White)</u>	<u>AG452D1520</u> <u>(Almond)</u>	<u>AG452V1523</u> <u>(Harvest)</u>	<u>AG452C1521</u> <u>(Coffee)</u>	<u>AG452A1522</u> <u>(Avocado)</u>
Xylol	62.3	62.1	52.8	58.7	51.5
Toluol	6.8	5.1	7.3	6.1	7.2
Butanol	10.4	9.3	15.9	----	15.7
Isopropanol	1.7	1.6	1.2	1.1	1.2
Solvesso 100	9.7	8.9	8.5	2.4	15.1
Isopar E	2.4	3.2	3.7	2.2	2.5
Heptane	5.7	7.4	8.6	5.2	5.7
Espesol 286	0.2	----	----	0.2	0.2
Butyl Acetate	0.5	0.7	0.8	0.5	0.5
PM Acetate	----	1.1	0.5	----	----
Diacetone Alcohol	----	----	----	23.2	----
Misc. Solvents	0.3	0.6	0.7	0.4	0.4
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Mansfield Products Company

March 1, 1985

Page Two

DURACRON

	AG129W1 (101.21) (White)	AG129D1047 (Almond)	AG129H1045 (Harvest)	AG129C1048 (Coffee)	AG129A1046 (Avocado)
Xylol	38.2	38.4	32.4	28.3	33.2
Toluol	35.6	36.8	39.0	40.7	41.5
Butanol	5.7	6.0	6.6	11.8	7.0
Isobutanol	4.0	1.3	7.2	2.2	6.2
Solvesso 100	8.9	11.7	8.7	9.5	9.4
Cellosolve Acetate	0.2	0.2	0.3	0.3	0.3
Butyl Carbitol	4.9	3.4	3.5	3.4	----
MEK	2.4	2.1	2.2	3.7	2.3
Misc. Solvents	0.1	0.1	0.1	0.1	0.1
	100.0	100.0	100.0	100.0	100.0

WATER REDUCIBLE PRIMER

	AG158G1281 (Gray W/R)
Water	73.3
Dimethyl Ethanol Amine	2.0
Butyl Carbitol	4.8
Butanol	3.3
Methyl Carbitol	4.8
Texanol	1.0
Butyl Cellosolve	1.5

Gray W/R Cont:

2-ethyl hexanol	8.2
Pine Oil	1.0
Misc. Solvents	0.1
	100.0

Mansfield Products Company

March 1, 1985

Page Three

Please be reminded that the above solvent information is considered proprietary and should not be disclosed to any third parties other than the EPA.

If you have any questions, feel free to call.

Sincerely,

Michael L. Sproule
Michael L. Sproule
Technical Manager - Appliance Finishes
MLS/kar

cc: R. G. Douds
G. L. Rucker
D. L. Roberts
P. L. Wyche
M. A. Clark

One Copy This Form Must Be Filled Out For Each Coating Line

1. BUSINESS LICENCE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER:	
MANSFIELD PRODUCTS COMPANY	
2. PLANT ADDRESS WHERE COATING OPERATION IS LOCATED:	
246 E. Fourth St., Mansfield, OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS):	
K001	2nd Floor 4-Loop Electrostatic Disc
4. SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.):	
MAJOR APPLIANCE (WASHERS & DRYERS)	
5. COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER:	
Ransburg Electrostatic 3600 RPM Deep Well Discs	
6. METHOD OF APPLICATION:	
SPRAY:	DIP COAT..... <input type="checkbox"/>
AIR ATOMIZATION..... <input type="checkbox"/>	FLOW COAT..... <input type="checkbox"/>
PRESSURE ATOMIZATION..... <input type="checkbox"/>	ELECTRO COAT.. <input type="checkbox"/>
HOT AIRLESS..... <input type="checkbox"/>	ROLL COAT..... <input type="checkbox"/>
ELECTROSTATIC.....AIR <input type="checkbox"/> DISC <input checked="" type="checkbox"/>	NUMBER OF COATING STATIONS <input checked="" type="checkbox"/> 4
7. BOOTH TYPE:	
BOOTH A.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	CONVEYORIZED <input checked="" type="checkbox"/>
BOOTH B.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	CONVEYORIZED <input checked="" type="checkbox"/>
BOOTH C.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	CONVEYORIZED <input checked="" type="checkbox"/>
BOOTH D.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	CONVEYORIZED <input checked="" type="checkbox"/>
8. DISPOSITION OF COATED ITEMS:	
AIR DRY <input type="checkbox"/>	OVEN BAKE <input checked="" type="checkbox"/>
OTHER <input type="checkbox"/>	
TIME BETWEEN COATING AND BAKING.... 25 Min.	
DRY OR BAKE TIME AND TEMP..... 20 Min. 350°F.	
9. OPERATIONAL DATA:	
TYPE OF ARTICLE COATED..... Metal - Flat Ware	
OPERATING SCHEDULE.....HOURS/DAY <input checked="" type="checkbox"/> 8 DAYS/YEAR <input checked="" type="checkbox"/> 235	

10. FOR EACH COATING PROVIDE: (Attached)

Type Of Coating:
 Manufacturer:
 Identification No.:
 Annual Usage:
 Weight Per Gal. :
 Weight Percent Solids:
 Chemical Composition Of Volatiles:
 (Chemical Names, Indicate If Wt. Or Vol. Percent)
 Solvent Thinner Ratio:
 (Gal.Thinner/Gal. Coating)

11. FOR EACH THINNER PROVIDE: (Attached)

Identification No.:
 Manufacturer:
 Annual Usage:
 Chemical Composition:
 (Indicate If Wt. Or Vol. Percent)

10.

K-001 - 2nd FLOOR 4-LOOP ELECTROSTATIC DISC

ACB-26

SOURCE DESCRIPTION	WHITE DURACRON	ALMOND DURACRON	HARVEST WHEAT DURACRON	AVOCADO DURACRON	COFFEE DURACRON	WHITE POLYCRON	ALMOND POLYCRON	HARVEST WHEAT POLYCRON	AVOCADO POLYCRON	COFFEE POLYCRON
COATING										
TYPE OF COATING	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH
MANUFACTURER	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG
IDENTIFICATION NO.	AG129W1 101.21	AG129D1047	AG129H1045	AG129A1046	AG129C1048	AG452W1519	AG452D1520	AG452Y1523	AG452A1522	AG452C1521
ANNUAL USAGE	3,850	2113	0	0	0	13,123	6,896	1,074	255	226
WEIGHT PERCENT SOLIDS REC	57.8	53.8	53.5	51.1	51.1	76.3	76.3	73.4	73.6	71.0
USED	49.5	45.0	45.1	42.8	41.8	68.6	68.6	65.5	65.2	62.9
WEIGHT PER GALLON	10.1	9.31	9.23	8.73	8.64	11.85	11.69	10.51	10.60	9.67

CHEMICAL COMPOSITION OF VOLATILES

CHEMICAL NAMES - DURACRON

1 BY WEIGHT

	AG129W1 (101.21) WHITE	AG129D1047 ALMOND	AG129H1045 HARVEST	AG129C1048 COFFEE	AG129A1046 AVOCADO
Xylol	38.2	38.4	32.4	28.3	33.2
Toluol	35.6	36.8	39.0	40.7	41.5
Butanol	5.7	6.0	6.6	11.8	7.0
Isobutanol	4.0	1.3	7.2	2.2	6.2
Solvaso 100	8.9	11.7	8.7	9.5	9.4
Cellosolve Acetate	0.2	0.2	0.3	0.3	0.3
Butyl Carbitol	4.9	3.4	3.5	3.4	---
MEK	2.4	2.1	2.2	3.7	2.3
Misc.Solvents	0.1 100.0	0.1 100.0	0.1 100.0	0.1 100.0	0.1 100.0
HIGH SOLIDS POLYCRON	AG452W1519 WHITE	AG452D1520 ALMOND	AG452Y1523 HARVEST	AG452C1521 COFFEE	AG452A1522 AVOCADO
Xylol	62.3	62.1	52.8	58.7	51.5
Toluol	6.8	5.1	7.3	6.1	7.2
Butanol	10.4	9.3	15.9	---	15.7
Isopropanol	1.7	1.6	1.2	1.1	1.2
Solvaso 100	9.7	8.9	8.5	2.4	15.1
Isopar E	2.4	3.2	3.7	2.2	2.5
Heptane	5.7	7.4	8.6	5.2	5.7
Espesol 286	0.2	---	---	0.2	0.2
Butyl Acetate	0.5	0.7	0.8	0.5	0.5
PM Acetate	---	1.1	0.5	---	---
Diacetone Alcohol	---	---	---	23.2	---
Misc.Solvents	0.3 100.0	0.6 100.0	0.7 100.0	0.4 100.0	0.4 100.0

Rev. 4/12/85

...Continued

10. K001 - 2ND FLOOR 4-LOOP ELECTROSTATIC DISC (CONTINUED)

SOLVENT THINNER RATIOGAL. SOLVENT/GAL. COATING

WHITE DURACRON 1/1.92	ALMOND DURACRON 1/1.73	HARVEST WHEAT DURACRON 1/1.73	AVOCADO DURACRON 1/1.65	COFFEE DURACRON 1/1.62
WHITE POLYCRON 1/2.13	ALMOND POLYCRON 1/2.13	HARVEST WHEAT POLYCRON 1/2.13	AVOCADO POLYCRON 1/2.13	COFFEE POLYCRON 1/2.13

11. K001 - 2ND FLOOR 4-LOOP ELECTROSTATIC DISC

<u>SOLVENT THINNER</u> <u>ANNUAL USAGE</u>	
DI-ACETONE ALCOHOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	441 GALLONS
XYLOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	9390 GALLONS
TOLUOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	1338 GALLONS
BUTYL-CARBITOL VAN WATERS & ROGERS CUYAHOGA HEIGHTS, OHIO	806 GALLONS

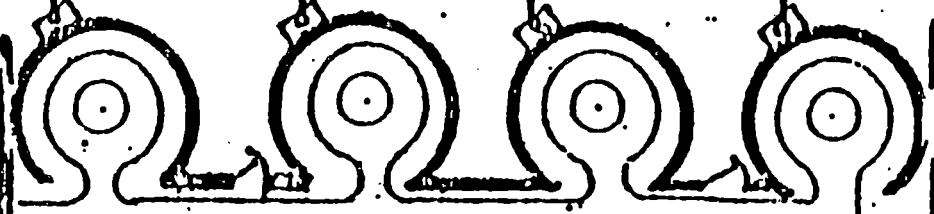
MANUAL
EXIT POINT

0 0 0 0 0 0 0 0
SPRAY BOOTH
WATER WASH

CONVEYOR
EXIT POINT

MANUAL SPRAY
DEACTIVATED

ELECTRO STATIC
DISCS



E-2 FINISH ELECTRO-STATIC

X001



STACK BLOWER #1

SURFACE COATING SUMMARY

ACB-26

One Copy Of This Form Must Be Filled Out For Each Coating Line

1. BUSINESS LICENCE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER:	
MANSFIELD PRODUCTS COMPANY	
2. PLANT ADDRESS WHERE COATING OPERATION IS LOCATED:	
246 E. FOURTH ST., MANSFIELD, OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS):	
K001 - 2ND FLOOR ELECTROSTATIC HAND GUN TOUCH-UP & OVEN	
4. SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.):	
MAJOR APPLIANCE (WASHERS & DRYERS)	
5. COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER:	
NORDSON AN-8 ELECTROSTATIC HAND GUNS	
6. METHOD OF APPLICATION:	
SPRAY: <input type="checkbox"/> AIR ATOMIZATION..... <input type="checkbox"/> PRESSURE ATOMIZATION.. <input type="checkbox"/> HOT AIRLESS..... <input type="checkbox"/> ELECTROSTATIC..... <input checked="" type="checkbox"/> AIR <input type="checkbox"/> DISC OTHER (IDENTIFY)..... <input type="checkbox"/>	DIP COAT..... <input type="checkbox"/> FLOW COAT..... <input type="checkbox"/> ELECTRO COAT.. <input type="checkbox"/> ROLL COAT..... <input type="checkbox"/> NUMBER OF COATING STATIONS <input checked="" type="checkbox"/> 2
7. BOOTH TYPE:	
BOOTH A.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> . CONVEYORIZED <input checked="" type="checkbox"/> BOOTH B.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> . CONVEYORIZED <input type="checkbox"/> BOOTH C.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> . CONVEYORIZED <input type="checkbox"/> BOOTH D.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> . CONVEYORIZED <input type="checkbox"/>	
8. DISPOSITION OF COATED ITEMS:	
AIR DRY <input type="checkbox"/> OVEN BAKE <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> TIME BETWEEN COATING AND BAKING.... 20 MIN. DRY OR BAKE TIME AND TEMP..... 20 MIN. 350°F.	
9. OPERATIONAL DATA:	
TYPE OF ARTICLE COATED..... METAL FLATWARE OPERATING SCHEDULE..... 8 HOURS/DAY <input checked="" type="checkbox"/> DAYS/YEAR <input checked="" type="checkbox"/> 235	

10. FOR EACH COATING PROVIDE: (ATTACHED)

Type Of Coating:
 Manufacturer:
 Identification No.:
 Annual Usage:
 Weight Per Gal. :
 Weight Percent Solids:
 Chemical Composition Of Volatiles:
 (Chemical Names, Indicate If Wt. Or Vol. Percent)
 Solvent Thinner Ratio:
 (Gal. Thinner/Gal. Coating)

11. FOR EACH THINNER PROVIDE: (ATTACHED)

Identification No.:
 Manufacturer:
 Annual Usage:
 Chemical Composition:
 (Indicate If Wt. Or Vol. Percent)

SOURCE DESCRIPTION	WHITE DURACRON	ALMOND DURACRON	HARVEST WHEAT DURACRON	AVOCADO DURACRON	COFFEE DURACRON	WHITE POLYCRON	ALMOND POLYCRON	HARVEST WHEAT POLYCRON	AVOCADO POLYCRON	COFFEE POLYCRON
<u>COATING</u>										
TYPE OF COATING	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH
MANUFACTURER	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG
IDENTIFICATION NO.	AG129W1 101.21	AG129D1047	AG129H1045	AG129A1046	AG129C1048	AG452W1519	AG452D1520	AG452Y1523	AG452A1522	AG452C1521
ANNUAL USAGE	219	121	5.5	29	0	750	393	61	15	12
WEIGHT PERCENT SOLIDS REC	57.8	53.8	53.5	51.1	51.1	76.3	76.3	73.4	73.4	71.0
USED	49.5	45.0	45.1	42.8	41.8	68.6	68.6	65.5	65.2	62.9
WEIGHT PER GALLON	10.1	9.31	9.23	8.73	8.64	11.85	11.69	10.51	10.60	9.67

CHEMICAL COMPOSITION OF VOLATILES

CHEMICAL NAMES - DURACRON

2 BY WEIGHT

	AG129W1 (101.21) WHITE	AG129D1047 ALMOND	AG129H1045 HARVEST	AG129C1048 COFFEE	AG129A1046 AVOCADO
Xylol	38.2	38.4	32.4	28.3	33.2
Toluol	35.6	36.8	39.0	40.7	41.5
Butanol	5.7	6.0	6.6	11.8	7.0
Isobutanol	4.0	1.3	7.2	2.2	6.2
Solvecso 100	8.9	11.7	8.7	9.5	9.4
Cellonolve Acetate	0.2	0.2	0.3	0.3	0.3
Butyl Carbitol	4.9	3.4	3.5	3.4	---
MEK	2.4	2.1	2.2	3.7	2.3
Misc. Solvents	0.1	0.1	0.1	0.1	0.1
	100.0	100.0	100.0	100.0	100.0

HIGH SOLIDS POLYCRON	AG452W1519 WHITE	AG452D1520 ALMOND	AG452Y1523 HARVEST	AG452C1521 COFFEE	AG452A1522 AVOCADO
Xylol	62.3	62.1	52.8	58.7	51.5
Toluol	6.8	5.1	7.3	6.1	7.2
Butanol	10.4	9.3	15.9	---	15.7
Isopropanol	1.7	1.6	1.2	1.1	1.2
Solvecso 100	9.7	8.9	8.5	2.4	15.1
Isopar E	2.4	3.2	3.7	2.2	2.5
Heptane	5.7	7.4	8.6	5.2	5.7
Espanol 286	0.2	---	---	0.2	0.2
Butyl Acetate	0.5	0.7	0.8	0.5	0.5
PM Acetate	---	1.1	0.5	---	---
Diacetone Alcohol	---	---	---	23.2	---
Misc. Solvents	0.3	0.6	0.7	0.4	0.4
	100.0	100.0	100.0	100.0	100.0

Rev. 4/12/85

...Continued

10. K001 - 2nd FLOOR ELECTROSTATIC HAND GUN TOUCH-UP & OVEN

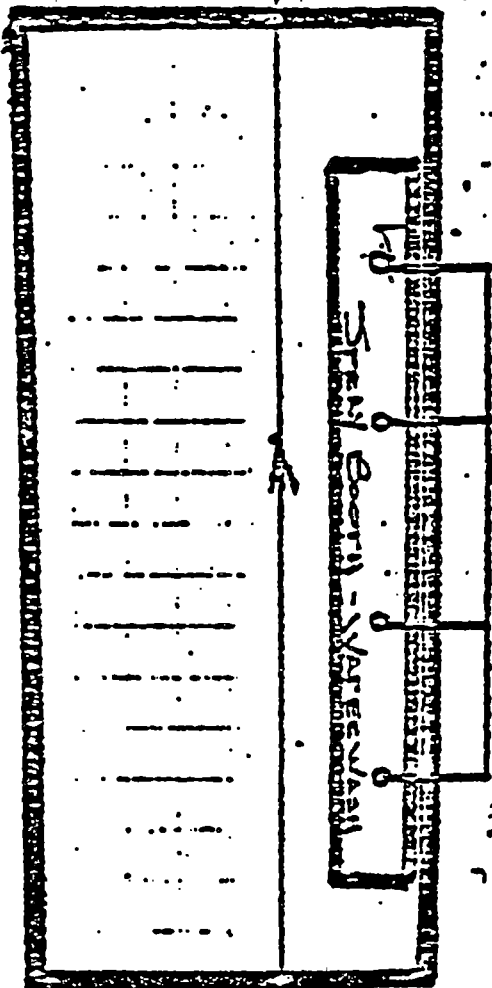
SOLVENT THINNER RATIOGAL. SOLVENT/GAL. COATING

WHITE DURACRON 1/1.92	ALMOND DURACRON 1/1.73	HARVEST WHEAT DURACRON 1/1.73	AVOCADO DURACRON 1/1.65	COFFEE DURACRON 1/1.62
WHITE POLYCRON 1/2.13	ALMOND POLYCRON 1/2.13	HARVEST WHEAT POLYCRON 1/2.13	AVOCADO POLYCRON 1/2.13	COFFEE POLYCRON 1/2.13

11. K001 - 2ND FLOOR ELECTROSTATIC HANDGUN TOUCH-UP & OVEN

<u>SOLVENT THINNER</u> <u>ANNUAL USAGE</u>	
DI-ACETONE ALCOHOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	25 GALLONS
XYLOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	537 GALLONS
TOLUOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	76 GALLONS
BUTYL-CARBITOL VAN WATERS & ROGERS CUYAHOGA HEIGHTS, OHIO	46 GALLONS

Side of Blower #2



ER FINISH MAINTAIN STAY

FACE B OR E-2

KOOL

CEILING FACE A

MATERIAL USED - 1996 POLYMER
AND BOLTS CONTAINING X-100

no

SURFACE COATING SUMMARY

ACB-26

One Copy Of This Form Must Be Filled Out For Each Coating Line

1. BUSINESS LICENCE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER:	
MANSFIELD PRODUCTS COMPANY	
2. PLANT ADDRESS WHERE COATING OPERATION IS LOCATED:	
246 E. Fourth St., Mansfield, OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS):	
K002	2nd Floor Waterborne Primer & Oven
4. SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.):	
Major Appliance (Washers & Dryers)	
5. COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER:	
Spra-Con Flo-Coater and Spra-Con Oven	
6. METHOD OF APPLICATION:	
SPRAY: <input type="checkbox"/> AIR ATOMIZATION..... <input type="checkbox"/> PRESSURE ATOMIZATION..... <input type="checkbox"/> HOT AIRLESS..... <input type="checkbox"/> ELECTROSTATIC..... <input type="checkbox"/> AIR <input type="checkbox"/> DISC <input type="checkbox"/> OTHER (IDENTIFY)..... <input type="checkbox"/>	DIP COAT..... <input type="checkbox"/> FLOW COAT..... <input checked="" type="checkbox"/> ELECTRO COAT... <input type="checkbox"/> ROLL COAT..... <input type="checkbox"/> NUMBER OF COATING STATIONS <input type="text" value="1"/>
7. BOOTH TYPE:	
BOOTH A.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/> BOOTH B.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/> BOOTH C.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/> BOOTH D.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/>	
8. DISPOSITION OF COATED ITEMS:	
AIR DRY <input type="checkbox"/> OVEN BAKE <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> TIME BETWEEN COATING AND BAKING.... 20 Min. DRY OR BAKE TIME AND TEMP..... 20 min. 350°F.	
9. OPERATIONAL DATA:	
TYPE OF ARTICLE COATED..... Metal - Flat Ware OPERATING SCHEDULE.....8.....HOURS/DAY <input checked="" type="checkbox"/> DAYS/YEAR <input checked="" type="checkbox"/> 235	

10. FOR EACH COATING PROVIDE: (Attached)

Type Of Coating:
 Manufacturer:
 Identification No.:
 Annual Usage:
 Weight Per Gal. :
 Weight Percent Solids:
 Chemical Composition Of Volatiles:
 (Chemical Names, Indicate If Wt. Or Vol. Percent)
 Solvent Thinner Ratio:
 (Gal.Thinner/Gal. Coating)

11. FOR EACH THINNER PROVIDE: (Attached)

Identification No.:
 Manufacturer:
 Annual Usage:
 Chemical Composition:
 (Indicate If Wt. Or Vol. Percent)

10. TYPE OF COATING	Waterborne Primer
MANUFACTURER	Pittsburgh Plate Glass, Delaware, OH (PPG)
IDENTIFICATION NO.	AG158G1281
ANNUAL USAGE	23,014 Gallons
WEIGHT PER GALLON	9.7# as received
WEIGHT PERCENT SOLIDS	45% as received; 36% as used (This is with 52.5% water)

CHEMICAL COMPOSITION OF
VOLATILES BY WEIGHT:

CHEMICAL NAMES

WATER REDUCIBLE PRIMER

	<u>AG158G1281 (GRAY W/R)</u>
Water	73.3
Dimethyl Ethanol Amine	2.0
Butyl Carbitol	4.8
Butanol	3.3
Methyl Carbitol	4.8
Texanol	1.0
Butyl Cellosolve	1.5
2-ethyl Hexanol	8.2
Pine Oil	1.0
Misc. Solvents	<u>0.1</u>
	100.0

Solvent Thinner Ratio 1/6.7

11. Water is only thinner.

Stack

Blow

MATERIAL USED - PEG-EPON 7000 K-1

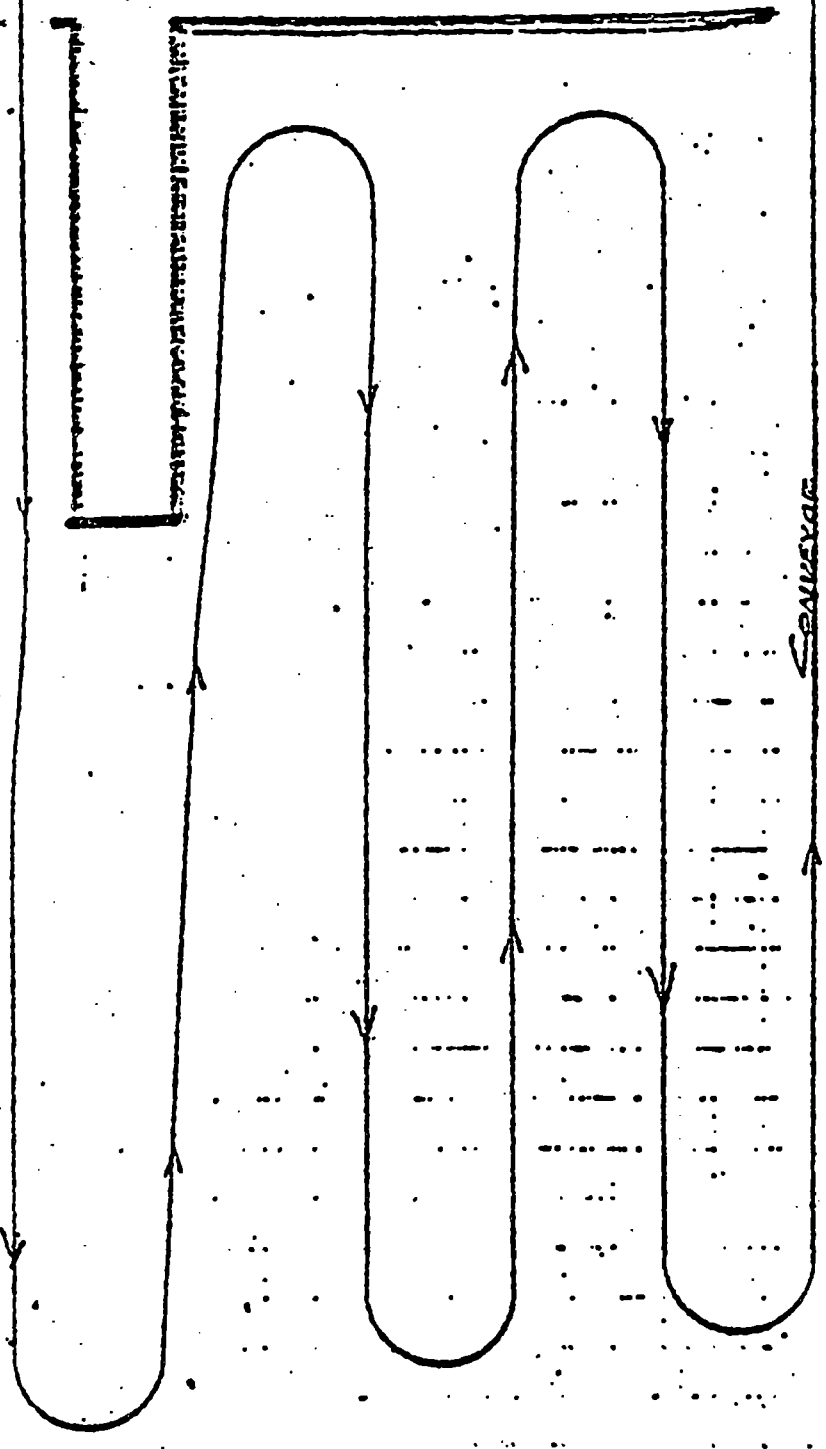
PROPOSED COMPONENTS PROPOSED

K2 EPOX FLOCOAT

K002



SAVING



One Copy Of This Form Must Be Filled Out For Each Coating Line

1. BUSINESS LICENCE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER:	
MANSFIELD PRODUCTS COMPANY	
2. PLANT ADDRESS WHERE COATING OPERATION IS LOCATED:	
246 E. FOURTH ST., MANSFIELD, OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS):	
K003 - 4TH FLOOR ELECTROSTATIC HAND GUN TOUCH-UP & OVEN	
4. SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.):	
MAJOR APPLIANCE (WASHERS & DRYERS)	
5. COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER:	
NORDSON AN-8 ELECTROSTATIC HAND GUNS	
6. METHOD OF APPLICATION:	
SPRAY: <input type="checkbox"/> AIR ATOMIZATION..... <input type="checkbox"/> PRESSURE ATOMIZATION.. <input type="checkbox"/> HOT AIRLESS..... <input type="checkbox"/> ELECTROSTATIC..... <input checked="" type="checkbox"/> DISC <input type="checkbox"/> OTHER (IDENTIFY).... <input type="checkbox"/>	DIP COAT..... <input type="checkbox"/> FLOW COAT..... <input type="checkbox"/> ELECTRO COAT.. <input type="checkbox"/> ROLL COAT..... <input type="checkbox"/> NUMBER OF COATING STATIONS <input type="text" value="2"/>
7. BOOTH TYPE:	
BOOTH A.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/> BOOTH B.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/> BOOTH C.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/> BOOTH D.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/>	
8. DISPOSITION OF COATED ITEMS:	
AIR DRY <input type="checkbox"/> OVEN BAKE <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> TIME BETWEEN COATING AND BAKING.... 20 MIN. DRY OR BAKE TIME AND TEMP..... 20 MIN. 350°F.	
9. OPERATIONAL DATA:	
TYPE OF ARTICLE COATED..... METAL FLATWARE OPERATING SCHEDULE.....8 HOURS/DAY <input checked="" type="checkbox"/> DAYS/YEAR <input checked="" type="checkbox"/> 235	

10. FOR EACH COATING PROVIDE: ATTACHED

Type Of Coating:
 Manufacturer:
 Identification No.:
 Annual Usage:
 Weight Per Gal. :
 Weight Percent Solids:
 Chemical Composition Of Volatiles:
 (Chemical Names, Indicate If Wt. Or Vol. Percent)
 Solvent Thinner Ratio:
 (Gal.Thinner/Gal. Coating)

11. FOR EACH THINNER PROVIDE: ATTACHED

Identification No.:
 Manufacturer:
 Annual Usage:
 Chemical Composition:
 (Indicate If Wt. Or Vol. Percent)

10.

KU03 - 4TH FLOOR ELECTROSTATIC HAND GUN TOUCH-UP & OVEN

ACH-26

SOURCE DESCRIPTION	WHITE DURACRON	ALMOND DURACRON	HARVEST WHEAT DURACRON	AVOCADO DURACRON	COFFEE DURACRON	WHITE POLYCRON	ALMOND POLYCRON	HARVEST WHEAT POLYCRON	AVOCADO POLYCRON	COFFEE POLYCRON
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COATING

TYPE OF COATING	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH
MANUFACTURER	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG
IDENTIFICATION NO.	AG129W1 101.21	AG129D1047	AG129H1045	AG129A1046	AG129C1048	AG452W1519	AG452D1520	AG452Y1523	AG452A1522	AG452C1521
ANNUAL USAGE	177	98	5	24	0	606	318	50	12	10
WEIGHT PERCENT SOLIDS REC	57.8	53.8	53.5	51.1	51.1	76.3	76.3	73.4	73.6	71.0
USED	49.5	45.0	45.1	42.8	41.8	68.6	68.6	65.5	65.2	62.9
WEIGHT PER GALLON	10.1	9.31	9.23	8.73	8.64	11.85	11.69	10.51	10.60	9.67

CHEMICAL COMPOSITION OF VOLATILES

CHEMICAL NAMES - DURACRON

% BY WEIGHT

	AG129W1 (101.21) WHITE	AG129D1047 ALMOND	AG129H1045 HARVEST	AG129C1048 COFFEE	AG129A1046 AVOCADO
Xylol	38.2	38.4	32.4	28.3	33.2
Toluol	35.6	36.8	39.0	40.7	41.5
Butanol	5.7	6.0	6.6	11.8	7.0
Isobutanol	4.0	1.3	7.2	2.2	6.2
Solvent 100	8.9	11.7	8.7	9.5	9.4
Cellonolve Acetate	0.2	0.2	0.3	0.3	0.3
Butyl Carbitol	4.9	3.4	3.5	3.4	---
MEK	2.4	2.1	2.2	3.7	2.3
Misc.Solvents	0.1	0.1	0.1	0.1	0.1
	100.0	100.0	100.0	100.0	100.0

HIGH SOLIDS POLYCRON

	AG452W1519 WHITE	AG452D1520 ALMOND	AG452Y1523 HARVEST	AG452C1521 COFFEE	AG452A1522 AVOCADO
Xylol	62.3	62.1	52.8	58.7	51.5
Toluol	6.8	5.1	7.3	6.1	7.2
Butanol	10.4	9.3	15.9	---	15.7
Isopropanol	1.7	1.6	1.2	1.1	1.2
Solvent 100	9.7	8.9	8.5	2.4	15.1
Isopar E	2.4	3.2	3.7	2.2	2.5
Heptane	5.7	7.4	8.6	5.2	5.7
Espesol 286	0.2	---	---	0.2	0.2
Butyl Acetate	0.5	0.7	0.8	0.5	0.5
PM Acetate	---	1.1	0.5	---	---
Diacetone Alcohol	---	---	---	23.2	---
Misc.Solvents	0.3	0.6	0.7	0.4	0.4

Revised 4/12/85

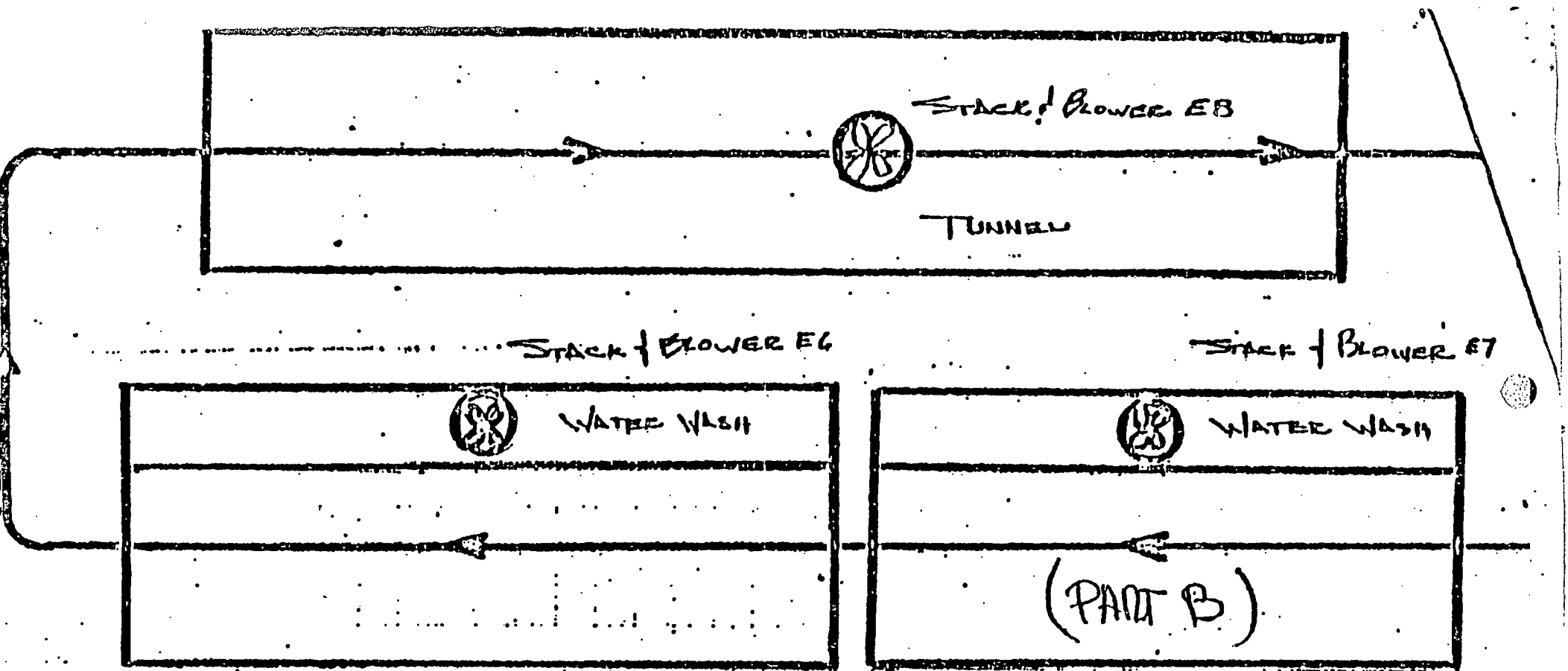
10. K003 - 4TH FLOOR ELECTROSTATIC HAND GUN TOUCH-UP & OVEN

SOLVENT THINNER RATIO
GAL. SOLVENT/GAL. COATING

WHITE DURACRON 1/1.92	ALMOND DURACRON 1/1.73	HARVEST WHEAT DURACRON 1/1.73	AVOCADO DURACRON 1/1.65	COFFEE DURACRON 1/1.62
WHITE POLYCRON 1/2.13	ALMOND POLYCRON 1/2.13	HARVEST WHEAT POLYCRON 1/2.13	AVOCADO POLYCRON 1/2.13	COFFEE POLYCRON 1/2.13

11. K003 - 4th FLOOR ELECTROSTATIC HANDGUN TOUCH-UP & OVEN

<u>SOLVENT THINNER</u> <u>ANNUAL USAGE</u>	
DI-ACETONE ALCOHOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	20 GALLONS
XYLOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	434 GALLONS
TOLUOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	62 GALLONS
BUTYL-CARBITOL VAN WATERS & ROGERS CUYAHOGA HEIGHTS, OHIO	37 GALLONS



PART B OF E-4

MATERIAL USED - PROTECTANT PAINT
ABSORBING CONTAMINANTS - XYLOL

FINISH MANUAL SPRAY IN E-4

1003

One Copy Of This Form Must Be Filled Out For Each Coating Line

1. BUSINESS LICENCE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER: MANSFIELD PRODUCTS COMPANY	
2. PLANT ADDRESS WHERE COATING OPERATION IS LOCATED: 246 E. FOURTH ST., MANSFIELD, OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS): K003 - 4TH FLOOR 4-LOOP ELECTROSTATIC DISCS	
4. SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.): MAJOR APPLIANCE (WASHERS & DRYERS)	
5. COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER: RANSBURG ELECTROSTATIC 3600 RPM, DEEP WELL DISCS	
6. METHOD OF APPLICATION: SPRAY: <input type="checkbox"/> DIP COAT..... <input type="checkbox"/> AIR ATOMIZATION..... <input type="checkbox"/> FLOW COAT..... <input type="checkbox"/> PRESSURE ATOMIZATION.. <input type="checkbox"/> ELECTRO COAT.. <input type="checkbox"/> HOT AIRLESS..... <input type="checkbox"/> ROLL COAT..... <input type="checkbox"/> NUMBER OF COATING STATIONS <input type="text" value="4"/> ELECTROSTATIC..... <input checked="" type="checkbox"/> AIR <input type="checkbox"/> DISC <input checked="" type="checkbox"/> OTHER (IDENTIFY)..... <input type="checkbox"/>	
7. BOOTH TYPE: BOOTH A.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/> BOOTH B.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/> BOOTH C.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/> BOOTH D.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/>	
8. DISPOSITION OF COATED ITEMS: AIR DRY <input type="checkbox"/> OVEN BAKE <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> TIME BETWEEN COATING AND BAKING.... 25 MIN. DRY OR BAKE TIME AND TEMP..... 20 MIN. 350° F.	
9. OPERATIONAL DATA: TYPE OF ARTICLE COATED..... METAL FLATWARE OPERATING SCHEDULE.....8 HOURS/DAY <input checked="" type="checkbox"/> DAYS/YEAR <input type="checkbox"/> 235	

10. FOR EACH COATING PROVIDE: ATTACHED

Type Of Coating:
 Manufacturer:
 Identification No.:
 Annual Usage:
 Weight Per Gal. :
 Weight Percent Solids:
 Chemical Composition Of Volatiles:
 (Chemical Names, Indicate If Wt. Or Vol. Percent)
 Solvent Thinner Ratio:
 (Gal.Thinner/Gal. Coating)

11. FOR EACH THINNER PROVIDE: ATTACHED

Identification No.:
 Manufacturer:
 Annual Usage:
 Chemical Composition:
 (Indicate If Wt. Or Vol. Percent)

SOURCE DESCRIPTION	WHITE DURACRON	ALMOND DURACRON	HARVEST WHEAT DURACRON	AVOCADO DURACRON	COFFEE DURACRON	WHITE POLYCRON	ALMOND POLYCRON	HARVEST WHEAT POLYCRON	AVOCADO POLYCRON	COFFEE POLYCRON
COATING										
TYPE OF COATING	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH	FINISH
MANUFACTURER	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG	PPG
IDENTIFICATION NO.	AG129W1	AG129D1047	AG129H1045	AG129A1046	AG129C1048	AG452W1519	AG452D1520	AG452Y1523	AG452A1522	AG452C1521
ANNUAL USAGE	3370	1854	0	0	0	11,517	6051	941	224	188
WEIGHT PERCENT SOLIDS REC	57.8	53.8	53.5	51.1	51.1	76.3	76.3	73.4	73.6	71.0
USED	49.5	45.0	45.1	42.8	41.8	68.6	68.6	65.5	65.2	62.9
WEIGHT PER GALLON	10.1	9.31	9.23	8.73	8.64	11.85	11.69	10.51	10.60	9.67

CHEMICAL COMPOSITION OF VOLATILES

CHEMICAL NAMES - DURACRON

		AG129W1 (101.21) WHITE	AG129D1047 ALMOND	AG129H1045 HARVEST	AG129C1048 COFFEE	AG129A1046 AVOCADO
% BY WEIGHT	Xylol	38.2	38.4	32.4	28.3	33.2
	Toluol	35.6	36.8	39.0	40.7	41.5
	Butanol	5.7	6.0	6.6	11.8	7.0
	Isobutanol	4.0	1.3	7.2	2.2	6.2
	Solvensso 100	8.9	11.7	8.7	9.5	9.4
	Celliosolve Acetate	0.2	0.2	0.3	0.3	0.3
	Butyl Carbitol	4.9	3.4	3.5	3.4	---
	MEK	2.4	2.1	2.2	3.7	2.3
	Misc. Solvents	0.1 100.0	0.1 100.0	0.1 100.0	0.1 100.0	0.1 100.0

	HIGH SOLIDS POLYCRON	AG452W1519 WHITE	AG452D1520 ALMOND	AG452Y1523 HARVEST	AG452C1521 COFFEE	AG452A1522 AVOCADO
	Xylol	62.3	62.1	52.8	58.7	51.5
	Toluol	6.8	5.1	7.3	6.1	7.2
	Butanol	10.4	9.3	15.9	---	15.7
	Isopropanol	1.7	1.6	1.2	1.1	1.2
	Solvensso 100	9.7	8.9	8.5	2.4	15.1
	Isopar E	2.4	3.2	3.7	2.2	2.5
	Heptane	5.7	7.4	8.6	5.2	5.7
	Kapesol 286	0.2	---	---	0.2	0.2
	Butyl Acetate	0.5	0.7	0.8	0.5	0.5
	PM Acetate	---	1.1	0.5	---	---
	Diacetone Alcohol	---	---	---	23.2	---
	Misc. Solvents	0.3 100.0	0.6 100.0	0.7 100.0	0.4 100.0	0.4 100.0

Revised 4/12/85

...Continued

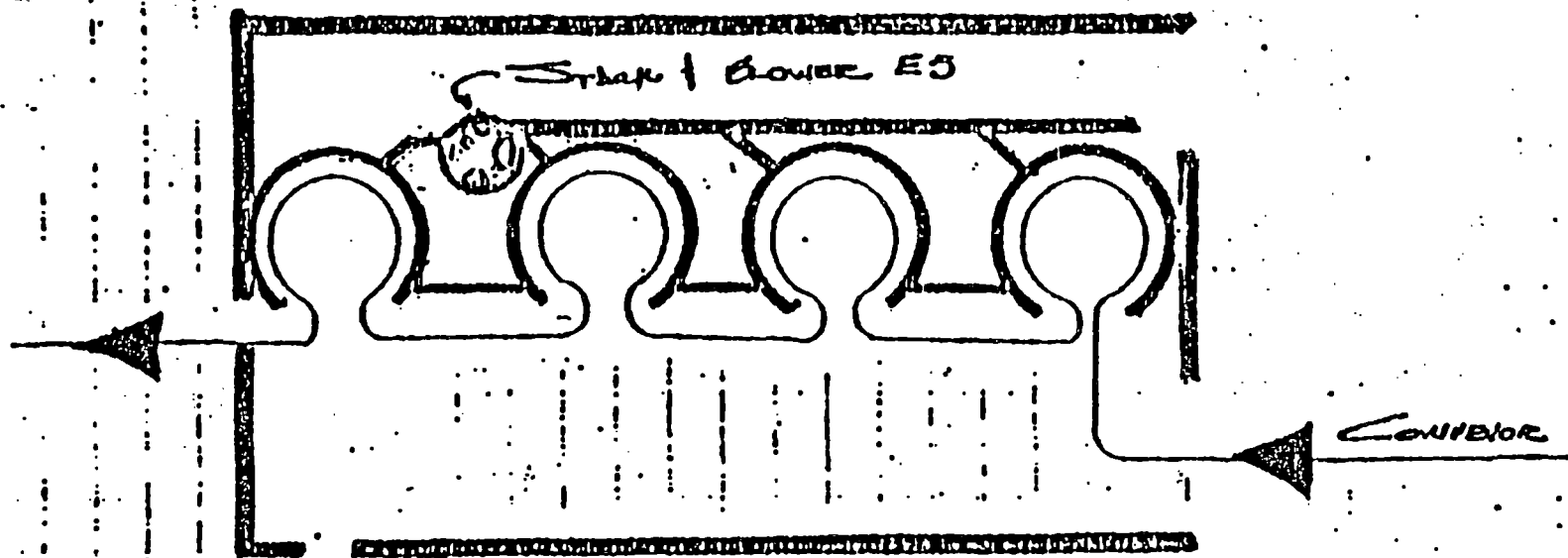
10. K003 - 4th FLOOR 4-LOOP ELECTROSTATIC DISC (CONTINUED)

SOLVENT THINNER RATIOGAL. SOLVENT/GAL. COATING

WHITE DURACRON 1/1.92	ALMOND DURACRON 1/1.73	HARVEST WHEAT DURACRON 1/1.73	AVOCADO DURACRON 1/1.65	COFFEE DURACRON 1/1.62
WHITE POLYCRON 1/2.13	ALMOND POLYCRON 1/2.13	HARVEST WHEAT POLYCRON 1/2.13	AVOCADO POLYCRON 1/2.13	COFFEE POLYCRON 1/2.13

11. K003 - 4th FLOOR 4-LOOP ELECTROSTATIC DISC

<u>SOLVENT THINNER</u> <u>ANNUAL USAGE</u>	
DI-ACETONE ALCOHOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	387 GALLONS
XYLOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	8243 GALLONS
TOLUOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	1173 GALLONS
BUTYL-CARBITOL VAN WATERS & ROGERS CUYAHOGA HEIGHTS, OHIO	707 GALLONS



PART A OF E-4

E-4 FINISH ELECTRO-STATIC

1003

MATERIAL USED - PPG POLYCHLORIDE
ANTISTATIC CONTAMINANTS - XYLOL

SURFACE COATING SUMMARY

ACB-26

One Copy Of This Form Must Be Filled Out For Each Coating Line

1. BUSINESS LICENCE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER:	
MANSFIELD PRODUCTS COMPANY	
2. PLANT ADDRESS WHERE COATING OPERATION IS LOCATED:	
246 E. FOURTH ST., MANSFIELD, OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS):	
K004	NO LONGER ACTIVE
4. SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.):	
METAL LARGE APPLIANCES	
5. COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER:	
6. METHOD OF APPLICATION:	
SPRAY: <input type="checkbox"/> AIR ATOMIZATION..... <input type="checkbox"/> PRESSURE ATOMIZATION.. <input type="checkbox"/> HOT AIRLESS..... <input type="checkbox"/> ELECTROSTATIC..... <input type="checkbox"/> AIR <input type="checkbox"/> DISC <input type="checkbox"/> OTHER (IDENTIFY).... <input type="checkbox"/>	DIP COAT..... <input type="checkbox"/> FLOW COAT..... <input type="checkbox"/> ELECTRO COAT.. <input type="checkbox"/> ROLL COAT..... <input type="checkbox"/> NUMBER OF COATING STATIONS <input type="checkbox"/>
7. BOOTH TYPE:	
BOOTH A.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/> BOOTH B.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/> BOOTH C.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/> BOOTH D.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/>	
8. DISPOSITION OF COATED ITEMS:	
AIR DRY <input type="checkbox"/> OVEN BAKE <input type="checkbox"/> OTHER <input type="checkbox"/> TIME BETWEEN COATING AND BAKING.... DRY OR BAKE TIME AND TEMP.....	
9. OPERATIONAL DATA:	
TYPE OF ARTICLE COATED..... OPERATING SCHEDULE.....HOURS/DAY <input type="checkbox"/> DAYS/YEAR <input type="checkbox"/>	

10. FOR EACH COATING PROVIDE:

Type Of Coating:
 Manufacturer:
 Identification No.:
 Annual Usage:
 Weight Per Gal. :
 Weight Percent Solids;
 Chemical Composition Of Volatiles:
 (Chemical Names, Indicate If Wt. Or Vol. Percent)
 Solvent Thinner Ratio:
 (Gal.Thinner/Gal. Coating)

11. FOR EACH THINNER PROVIDE:

Identification No.:
 Manufacturer:
 Annual Usage:
 Chemical Composition:
 (Indicate If Wt. Or Vol. Percent)

U.S. ENVIRONMENTAL PROTECTION AGENCY

SURFACE COATING SUMMARY

One Copy Of This Form Must Be Filled Out For Each Coating Line

1. BUSINESS LICENCE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER:	
MANSFIELD PRODUCTS COMPANY	
2. PLANT ADDRESS WHERE COATING OPERATION IS LOCATED:	
246 E. FOURTH ST., MANSFIELD, OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS):	
K005 - 3RD FLOOR ELECTROSTATIC HAND GUN & OVEN	
4. SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.):	
MAJOR APPLIANCE (WASHERS & DRYERS)	
5. COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER:	
NORDSON AN-8 ELECTROSTATIC HAND GUN	
6. METHOD OF APPLICATION:	
SPRAY: <input type="checkbox"/> AIR ATOMIZATION..... <input type="checkbox"/> PRESSURE ATOMIZATION... <input type="checkbox"/> HOT AIRLESS..... <input type="checkbox"/> ELECTROSTATIC..... <input checked="" type="checkbox"/> AIR <input type="checkbox"/> DISC <input type="checkbox"/> OTHER (IDENTIFY)..... <input type="checkbox"/>	DIP COAT..... <input type="checkbox"/> FLOW COAT..... <input type="checkbox"/> ELECTRO COAT... <input type="checkbox"/> ROLL COAT..... <input type="checkbox"/> NUMBER OF COATING STATIONS <input type="checkbox"/> 4
7. BOOTH TYPE:	
BOOTH A.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/> BOOTH B.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input checked="" type="checkbox"/> BOOTH C.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/> BOOTH D.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/>	
8. DISPOSITION OF COATED ITEMS:	
AIR DRY <input type="checkbox"/> OVEN BAKE <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> TIME BETWEEN COATING AND BAKING.... .20 DRY OR BAKE TIME AND TEMP..... 20 MIN. 350°F.	
9. OPERATIONAL DATA:	
TYPE OF ARTICLE COATED..... METAL FLATWARE OPERATING SCHEDULE.....8..HOURS/DAY <input checked="" type="checkbox"/> DAYS/YEAR <input checked="" type="checkbox"/> 235	

10. FOR EACH COATING PROVIDE: ATTACHED

Type Of Coatings:

Manufacturer:

Identification No.:

Annual Usage:

Weight Per Gal. :

Weight Percent Solids:

 Chemical Composition Of Volatiles:
 (Chemical Names, Indicate If Wt. Or Vol. Percent)

 Solvent Thinner Ratio:
 (Gal.Thinner/Gal. Coating)

11. FOR EACH THINNER PROVIDE: ATTACHED

Identification No.:

Manufacturer:

Annual Usage:

 Chemical Composition:
 (Indicate If Wt. Or Vol. Percent)

10.

K005 - 3RD FLOOR ELECTROSTATIC HAND GUN TOUCH-UP & OVEN

ACB-26

SOURCE DESCRIPTION

WHITE
DURACRONALMOND
DURACRONHARVEST
WHEAT
DURACRONAVOCADO
DURACRONCOFFEE
DURACRONWHITE
POLYCRONALMOND
POLYCRONHARVEST
WHEAT
POLYCRONAVOCADO
POLYCRONCOFFEE
POLYCRON

COATING

TYPE OF COATING
MANUFACTURER
IDENTIFICATION NO.FINISH
PPG
AG129W1
101.21FINISH
PPG
AG129D1047FINISH
PPG
AG129H1045FINISH
PPG
AG129A1046FINISH
PPG
AG129C1048FINISH
PPG
AG452W1519FINISH
PPG
AG452D1520FINISH
PPG
AG452Y1523FINISH
PPG
AG452A1522FINISH
PPG
AG452C1521ANNUAL USAGE
WEIGHT PERCENT SOLIDS REC
USED
WEIGHT PER GALLON319
57.8
49.5
10.1181
53.8
45.0
9.310
53.5
45.1
9.230
51.0
42.8
8.730
51.0
41.8
8.641125
76.3
68.6
11.85590
76.3
68.6
11.6990
73.4
65.5
10.5122
73.6
65.2
10.6018
71.0
62.9
9.67

CHEMICAL COMPOSITION OF VOLATILES

CHEMICAL NAMES - DURACRON

AG129W1
(101.21)
WHITEAG129D1047
ALMONDAG129H1045
HARVESTAG129C1048
COFFEEAG129A1046
AVOCADO

% BY WEIGHT

Xylol

38.2

38.4

32.4

28.3

33.2

Toluol

35.6

36.8

39.0

40.7

41.5

Butanol

5.7

6.0

6.6

11.8

7.0

Isobutanol

4.0

1.3

7.2

2.2

6.2

Solvents 100

8.9

11.7

8.7

9.5

9.4

Cellulosolve
Acetate

0.2

0.2

0.3

0.3

0.3

Butyl
Carbitol

4.9

3.4

3.5

3.4

MEK

2.4

2.1

2.2

3.7

2.3

Misc. Solvents

0.1
100.00.1
100.00.1
100.00.1
100.00.1
100.0

HIGH SOLIDS POLYCRON

AG452W1519
WHITEAG452D1520
ALMONDAG452Y1523
HARVESTAG452C1521
COFFEEAG452A1522
AVOCADO

Xylol

62.3

62.1

52.8

58.7

51.5

Toluol

6.8

5.1

7.3

6.1

7.2

Butanol

10.4

9.3

15.9

15.7

Isopropanol

1.7

1.6

1.2

1.1

1.2

Solvents 100

9.7

8.9

8.5

2.4

15.1

Isopar E

2.4

3.2

3.7

2.2

2.5

Heptane

5.7

7.4

8.6

5.2

5.7

Espenol 286

0.2

0.2

0.2

Butyl
Acetate

0.5

0.7

0.8

0.5

0.5

PM Acetate

1.1

0.5

Diacetone
Alcohol

23.2

Misc. Solvents

0.3

0.6

0.7

0.4

0.4

Revised 4/12/85

Continued

10. K005 - 3RD FLOOR ELECTROSTATIC HAND GUN TOUCH-UP & OVEN

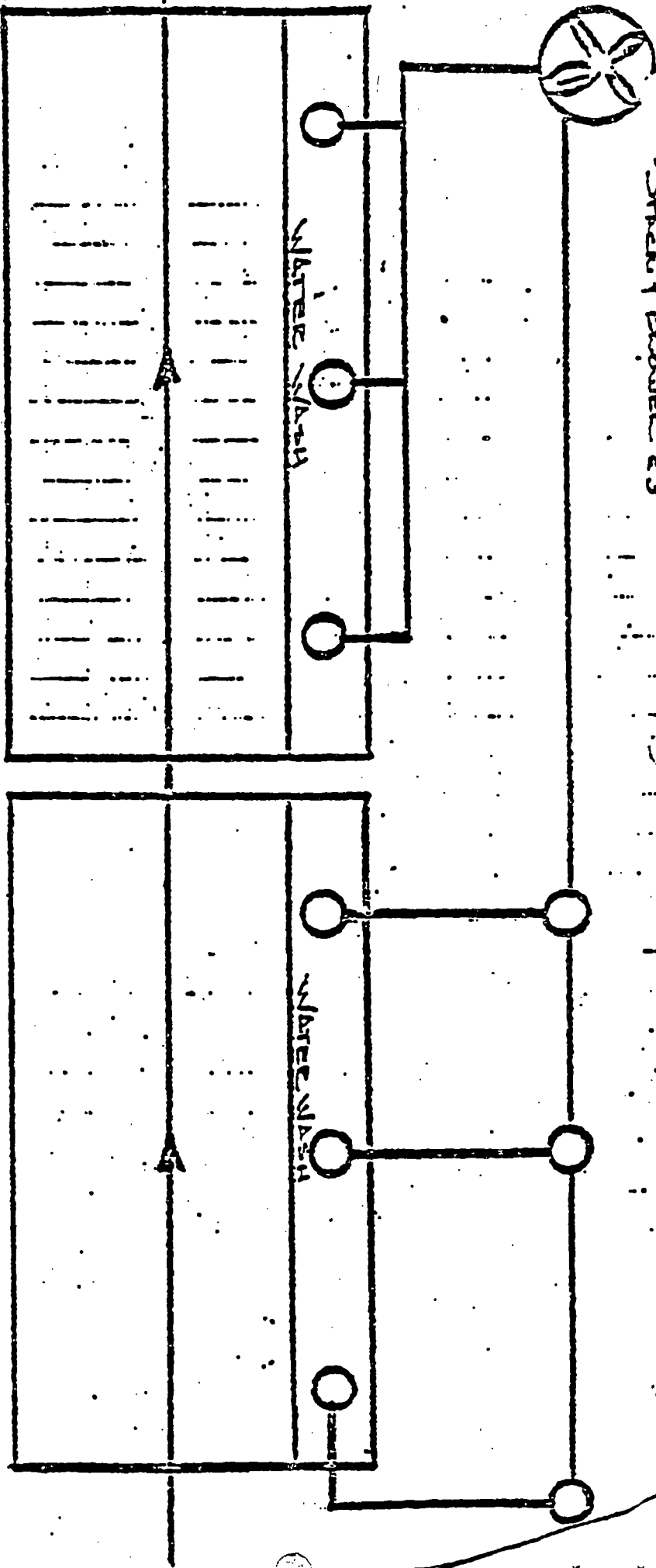
SOLVENT THINNER RATIO
GAL. SOLVENT/GAL. COATING

WHITE DURACRON 1/1.92	ALMOND DURACRON 1/1.73	HARVEST WHEAT DURACRON 1/1.73	AVOCADO DURACRON 1/1.65	COFFEE DURACRON 1/1.62
WHITE POLYCRON 1/2.13	ALMOND POLYCRON 1/2.13	HARVEST WHEAT POLYCRON 1/2.13	AVOCADO POLYCRON 1/2.13	COFFEE POLYCRON 1/2.13

11. K005 - 3RD FLOOR ELECTROSTATIC HANDGUN TOUCH-UP & OVEN

<u>SOLVENT THINNER</u> <u>ANNUAL USAGE</u>	
DI-ACETONE ALCOHOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	37 GALLONS
XYLOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	807 GALLONS
TOLUOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	114 GALLONS
BUTYL-CARBITOL VAN WATERS & ROGERS CUYAHOGA HEIGHTS, OHIO	69 GALLONS

Circuit Diagram E3



MANUAL SPIN IN E-36

K005

WATERING USED P.O.G. ROYAL POWER
PIMACUE CONTAINERS - X100L

U.S. ENVIRONMENTAL PROTECTION AGENCY

SURFACE COATING SUMMARY

One Copy Of This Form Must Be Filled Out For Each Coating Line

1. BUSINESS LICENCE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER: MANSFIELD PRODUCTS COMPANY	
2. PLANT ADDRESS WHERE COATING OPERATION IS LOCATED: 246 E. FOURTH ST., MANSFIELD, OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS): K007 NO LONGER ACTIVE	
4. SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.): METAL - LARGE APPLIANCES	
5. COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER:	
6. METHOD OF APPLICATION: <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> SPRAY: AIR ATOMIZATION.....<input type="checkbox"/> PRESSURE ATOMIZATION.....<input type="checkbox"/> HOT AIRLESS.....<input type="checkbox"/> ELECTROSTATIC.....<input type="checkbox"/> AIR <input type="checkbox"/> DISC <input type="checkbox"/> OTHER (IDENTIFY).....<input type="checkbox"/> </div> <div style="width: 45%;"> DIP COAT.....<input type="checkbox"/> FLOW COAT.....<input type="checkbox"/> ELECTRO COAT..<input type="checkbox"/> ROLL COAT.....<input type="checkbox"/> NUMBER OF COATING STATIONS <input type="checkbox"/> </div> </div>	
7. BOOTH TYPE: BOOTH A.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/> BOOTH B.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/> BOOTH C.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/> BOOTH D.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> , CONVEYORIZED <input type="checkbox"/>	
8. DISPOSITION OF COATED ITEMS: AIR DRY <input type="checkbox"/> OVEN BAKE <input type="checkbox"/> OTHER <input type="checkbox"/> TIME BETWEEN COATING AND BAKING.... DRY OR BAKE TIME AND TEMP.....	
9. OPERATIONAL DATA: TYPE OF ARTICLE COATED..... OPERATING SCHEDULE.....HOURS/DAY <input type="checkbox"/> DAYS/YEAR <input type="checkbox"/>	

10. FOR EACH COATING PROVIDE:

Type Of Coating:
Manufacturer:
Identification No.:
Annual Usage:
Weight Per Gal. :
Weight Percent Solids:
Chemical Composition Of Volatiles:
(Chemical Names, Indicate If Wt. Or Vol. Percent)
Solvent Thinner Ratio:
(Gal.Thinner/Gal. Coating)

11. FOR EACH THINNER PROVIDE:

Identification No.:
Manufacturer:
Annual Usage:
Chemical Composition:
(Indicate If Wt. Or Vol. Percent)

One Copy Of This Form Must Be Filled Out For Each Coating Line

1. BUSINESS LICENCE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER: MANSFIELD PRODUCTS COMPANY	
2. PLANT ADDRESS WHERE COATING OPERATION IS LOCATED: 246 E. FOURTH ST., MANSFIELD, OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS): K008 - 5TH FLOOR WATERBORNE PRIMER & OVEN	
4. SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.): MAJOR APPLIANCE (WASHERS & DRYERS)	
5. COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER: SPRA-CON FLO-COATER & SPRA-CON OVEN	
6. METHOD OF APPLICATION: <div style="display: flex; justify-content: space-between;"> <div> SPRAY: AIR ATOMIZATION.....<input type="checkbox"/> PRESSURE ATOMIZATION.....<input type="checkbox"/> HOT AIRLESS.....<input type="checkbox"/> ELECTROSTATIC.....AIR <input type="checkbox"/> DISC <input type="checkbox"/> OTHER (IDENTIFY).....<input type="checkbox"/> </div> <div> DIP COAT.....<input type="checkbox"/> FLOW COAT.....<input checked="" type="checkbox"/> ELECTRO COAT.....<input type="checkbox"/> ROLL COAT.....<input type="checkbox"/> NUMBER OF COATING STATIONS <input type="text" value="1"/> </div> </div>	
7. BOOTH TYPE: BOOTH A.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> . CONVEYORIZED <input checked="" type="checkbox"/> BOOTH B.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> . CONVEYORIZED <input type="checkbox"/> BOOTH C.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> . CONVEYORIZED <input type="checkbox"/> BOOTH D.....FLOOR DRAFT <input type="checkbox"/> WALL DRAFT <input type="checkbox"/> OTHER <input type="checkbox"/> . CONVEYORIZED <input type="checkbox"/>	
8. DISPOSITION OF COATED ITEMS: AIR DRY <input type="checkbox"/> OVEN BAKE <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> TIME BETWEEN COATING AND BAKING..... 20 MIN. DRY OR BAKE TIME AND TEMP..... 20 MIN. 350°F.	
9. OPERATIONAL DATA: TYPE OF ARTICLE COATED..... METAL FLATWARE OPERATING SCHEDULE.....8...HOURS/DAY <input checked="" type="checkbox"/> DAYS/YEAR <input checked="" type="checkbox"/> 235	

10. FOR EACH COATING PROVIDE:(ATTACHED)

Type Of Coating:
 Manufacturer:
 Identification No.:
 Annual Usage:
 Weight Per Gal. :
 Weight Percent Solids:
 Chemical Composition Of Volatiles:
 (Chemical Names, Indicate If Wt. Or Vol. Percent)
 Solvent Thinner Ratio:
 (Gal.Thinner/Gal. Coating)

11. FOR EACH THINNER PROVIDE: (ATTACHED)

Identification No.:
 Manufacturer:
 Annual Usage:
 Chemical Composition:
 (Indicate If Wt. Or Vol. Percent)

10. K008 - 5TH FLOOR WATERBORNE PRIMER & OVEN

COATING

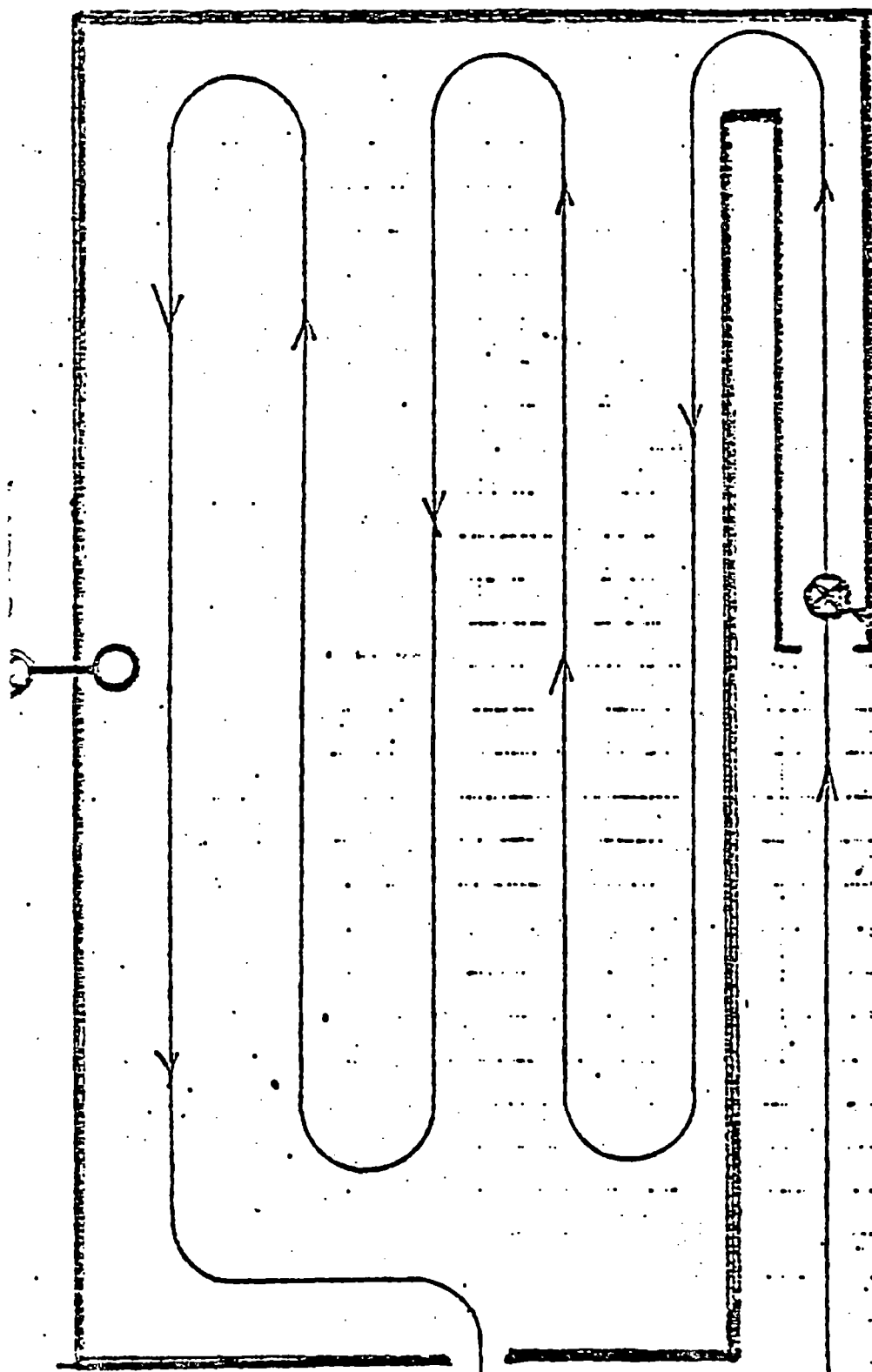
TYPE OF COATING:	WATERBORNE PRIMER
MANUFACTURER:	PITTSBURGH PLATE GLASS, DELAWARE, OH (PPG)
IDENTIFICATION NO.:	AG158G1281
ANNUAL USAGE:	16,121 GALLONS
WEIGHT PER GALLON:	9.7# AS RECEIVED
WEIGHT PERCENT SOLIDS:	45% AS RECEIVED; 36% AS USED (THIS IS WITH 52.5% WATER)

CHEMICAL COMPOSITION OF VOLATILES BY WEIGHT:
 CHEMICAL NAMES - WATER REDUCIBLE PRIMER

	AG158G1281
	<u>GRAY W/R</u>
Water	73.3
Dimethyl Ethanol Amine	2.0
Butyl Carbitol	4.8
Butanol	3.3
Methyl Carbitol	4.8
Texanol	1.0
Butyl Cellosolve	1.5
2-ethyl Hexanol	8.2
Pine Oil	1.0
Misc. Solvents	<u>0.1</u>
	100.0

Solvent Thinner Ratio 1/6.7

11. Water is only thinner.



OWER

Stack of
Blower
E II

Stack of Blower E10

E-S EPON Flocor
K008

PIY SAMPLE PROPOSAL FORM REGION V

DATE FORM COMPLETED 8/13/90 PAN# FOH05325A TDD# FO5-9891-017 EPA I.D.# 2HD000723601

SITE NAME (PRINT) Alameda Field Park CITY Alameda STATE CA

TEAM LEADER LARRY LUECK SAMPLER STEVE E. KARECKI DATE SENT TO HSCC NA

CODE # 14960 DRINKING WATER BAB # ORGANIC INORGANIC NA

ROUTINE ANALYTICAL SERVICES (BAB)

LOW WATERS MONITORING WELLS

FRACTION NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL

VOA
ABN#
PEST/PCB
METALS
CN

EXPECTED DATE TO UNPLUG

LABORATORY NAME

NUMBER OF COOLERS SHIPPED

AIR BILL NUMBERS

DATE SHIPPED TO LAB

LOW WATERS SURFACE WATERS FRACTION NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL

VOA
ABN#
PEST/PCB
METALS
CN

EXPECTED DATE TO UNPLUG

LABORATORY NAME

NUMBER OF COOLERS SHIPPED

AIR BILL NUMBERS

DATE SHIPPED TO LAB

LOW BOILS/BEDIMENTS/SLUDGES FRACTION NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL

VOA
ABN#
PEST/PCB
METALS
CN

EXPECTED DATE TO UNPLUG

LABORATORY NAME

NUMBER OF COOLERS SHIPPED

AIR BILL NUMBERS

DATE SHIPPED TO LAB

9 F O F 0 = 9 W/ 9/24/90 LANCOT SKINNER

RESIDENTIAL/ MUNICIPAL WELL WATERS (DRINKING WATER SAMPLES)

LOW DETECTION LIMITS/FAST TURN AROUND

FRACTION NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL

VOA
ABN#
PEST/PCB
METALS
CN

EXPECTED DATE TO UNPLUG

LABORATORY NAME

NUMBER OF COOLERS SHIPPED

AIR BILL NUMBERS

DATE SHIPPED TO LAB

SEE NEXT PAGE FOR SPECIAL ANALYTICAL SERVICE REQUEST FOR THIS SITE

BAB #

confirmed

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME		NO. OF CONTAINERS		REMARKS	
F010532		F05-4001-017 CASE: 14960				COOLER # 169	
SAMPLERS: (Signature) <i>Ed Kanerhi</i>							
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	TAG NUMBER	LOW CONCENTRATION MATRIX
EHQ 42	9-25-90	1630		X	S1	3 2 1	132676-78 SOIL
EHQ 43	9-25-90	1230		X	S2	3 2 1	132680-82 SOIL
EHQ 44	9-25-90	1400		X	S3	3 2 1	132684-86 SOIL
EHQ 45	9-25-90	1445		X	S4	3 2 1	132688-90 SOIL
EHQ 46	9-25-90	1520		X	S5	3 2 1	132692-94 SOIL
EHQ 47	9-25-90	1230		X	S6	3 2 1	132696-98 SOIL
EHQ 48	9-25-90	1300		X	S7	3 2 1	132700-02 SOIL
EHQ 49	9-25-90	1330		X	S8	3 2 1	132704-06 SOIL
EHQ 50	9-25-90	1330		X	S9	3 2 1	132708-10 SOIL
						LOT # 120ml: 60201013	
						802: 0157093	
						(OTR IN COOLER # 169)	
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)	
<i>Ed Kanerhi</i>		9-25-90 1830					
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)		Remarks	
						SHIPPED FEDEX TO ENCOT AIRBILL # 9157647284 CUSTODY SEALS: 129244, 129245	

BO BOX 816
Gautier Postal Service Office
PO BOX 816
GAUTIER, MD 21054-0816
US POSTAGE

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME		NO. OF CONTAINERS		REMARKS											
SAMPLERS: (Signature)																	
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	TAG NUMBERS											
MEHA 35	9-25-90	1630		X	S1	1									132679	SOIL	
MEHA 36	9-25-90	1230		X	S2	1									132683	SOIL	
MEHA 37	9-25-90	1400		X	S3	1									132687	SOIL	
MEHA 38	9-25-90	1445		X	S4	1									132691	SOIL	
MEHA 39	9-25-90	1520		X	S5	1									132695	SOIL	
MEHA 40	9-25-90	1230		X	S6	1									132699	SOIL	
MEHA 41	9-25-90	1300		X	S7	1									132703	SOIL	
MEHA 42	9-25-90	1330		X	S8	1									132707	SOIL	
MEHA 43	9-25-90	1330		X	S9	1									132711	SOIL	
						LOT # 802 0157043											
						1TR IN COOLER # 168											
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)							
S. K. K...		9-25-90 1830															
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)							
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)		Date / Time		Remarks									
								SHIPPED FED EX TO SKINNER AIRBILL # 9157647295 CUSTODY SEAL 128885, 128886									

Organic Traffic Report

(For CLP Use Only)

Case Number

SAS No. (if applicable)

14960

N/A

1. Type of Activity (Check one)

☐ ENF ☐ NPLD ☐ RA ☒ SI ☐ STSI
☐ ER ☐ O&M ☐ RD ☐ ST ☐ Other (Specify)
☐ ESI ☐ PA ☐ RIFS ☐ STPA

Non-Superfund Program

Site Name

MANFIELD PRODUCTS CO.

City, State

MANFIELD, OH

Site Spill ID

N/A

2. Region Number

Sampler (Name)

ED KARECKI
3. Ship To: SCOTT DEVORE
ENV. CONTROL TECH
3985 RESEARCH PKWY
ANN ARBOR, MI 48106

3. Ship To: SCOTT DEVORE

ENV. CONTROL TECH
3995 RESEARCH

ANN ARBOR MI 48106

[illegible]

Sampling Co.

F97

4. Date Shipped

9-25-90	Alrbill Number:
---------	-----------------

9157647284

Triple Volume required for matrix

spike/duplicate aqueous sample.

Ship medium and high concentration samples in paint cans

samples in paint cans.

See reverse for additional instr

Carrier

21 22 23 24 25

5. Sample Description (Enter in Column A)

1. Surface Water
2. Ground Water
3. Leachate
4. Rinseate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) (Specify)

IF VOA SAMPLE PRESERVED INDICATE IN
COLUMN C WITH Y OR N.

[illegible]

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION S1

SAMPLING DATE 9-25-90 SAMPLING TIME 1630

ORGANIC TRAFFIC NUMBER EHQ 42

INORGANIC TRAFFIC NUMBER MEHA 35

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VDA	13 26 76	W0201013
120 ml	VDA	77	↓
8oz	EXT	78	0157043
8oz	MET	79	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

SANDY MED. BROWN TOPSOIL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY _____

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 52

SAMPLING DATE 9-25-90 SAMPLING TIME 1230

ORGANIC TRAFFIC NUMBER E HQ 43

INORGANIC TRAFFIC NUMBER ME HA 36

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132680	W0201013
120 ml	VOA	81	↓
802	EXT	82	0157043
802	MET	83	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SILTY SAND + GRAVEL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION S 3

SAMPLING DATE 9-25-90 SAMPLING TIME 1400

ORGANIC TRAFFIC NUMBER E HQ 44

INORGANIC TRAFFIC NUMBER ME HA 36

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA		W0201013
120 ml	VOA		↓
8oz	EXT		0157043
8oz	MET		↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.
CASE NUMBER 14960

SAMPLE #/STATION LOCATION 54

SAMPLING DATE 9-25-90 SAMPLING TIME 1445

ORGANIC TRAFFIC NUMBER EHQ 42
INORGANIC TRAFFIC NUMBER MEHA35

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132688	W0201013
120 ml	VOA	89	↓
80z	EXT	90	0157043
80z	NET	91	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: BROWN MUD

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS
pH N/A
CONDUCTIVITY
TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 55

SAMPLING DATE 9-25-90 SAMPLING TIME 1520

ORGANIC TRAFFIC NUMBER E HQ46

INORGANIC TRAFFIC NUMBER ME HA 39

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132692	W0201013
120 ml	VOA	93	↓
8oz	EXT	94	0157043
8oz	NET	95	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SAND

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY N/A

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TOOL MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 56

SAMPLING DATE 9-25-90 SAMPLING TIME 1230

ORGANIC TRAFFIC NUMBER E HQ 47

INORGANIC TRAFFIC NUMBER ME HA 40

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132696	W0201013
120 ml	VOA	97	↓
8oz	EXT	98	0157043
8oz	MET	99	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: _____

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS _____

pH N/A

CONDUCTIVITY N/A

TEMPERATURE _____

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 57

SAMPLING DATE 9-25-90

SAMPLING TIME 1300

ORGANIC TRAFFIC NUMBER

E HQ48

INORGANIC TRAFFIC NUMBER

ME HA 41

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132700	W0201013
120 ml	VOA	01	↓
8oz	EXT	02	0157043
8oz	MET	03	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: DRY ORGANIC RICH
CHOCOLATE COLORED TOPSOIL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

N/A

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 58

SAMPLING DATE 9-25-90 SAMPLING TIME 1330

ORGANIC TRAFFIC NUMBER E HQ 49

INORGANIC TRAFFIC NUMBER ME HA 42

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132 704	W0201013
120 ml	VOA	05	↓
80z	EXT	06	0157043
80z	MET	07	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: VERY DARK, BROWN
TO BLACK SOIL, WITH SOME SAND + GRAVEL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TOWN MANSFIELD PRODUCTS CO.

CASE NUMBER 14960

SAMPLE #/STATION LOCATION 59

SAMPLING DATE 9-25-90 SAMPLING TIME 1330

ORGANIC TRAFFIC NUMBER E HQ 50

INORGANIC TRAFFIC NUMBER MEHA 43

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132 708	W0201013
120 ml	VOA	09	↓
8oz	EXT	10	0157043
8oz	NET	✓ 11	↓

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: SANDY DARK BROWN TO BLACK SOIL WITH SOME SILT + GRAVEL

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH N/A

CONDUCTIVITY

TEMPERATURE

Zone A:

Special Flood Hazard Areas inundated by the 100-year flood, determined by approximate methods; no base flood elevations are shown or FHF's determined.

Zone A0:

Special Flood Hazard Areas inundated by types of 100-year shallow flooding where depths are between 1.0 and 3.0 feet; depths are shown; but no FHF's are determined.

Zones A3, A4, A6, and A8:

Special Flood Hazard Areas inundated by the 100-year flood, with base flood elevations shown, and zones subdivided according to FHF.

Zone B:

Areas between the Special Flood Hazard Areas and the limits of the 500-year flood; areas that are protected from the 100- and 500-year floods by dike, levee, or other water control structure; areas subject to certain types of 100-year shallow flooding where depths are less than 1.0 foot; and, areas subject to 100-year flooding from sources with drainage areas less than 1 square mile. Zone B is not subdivided.

Zone C:

Areas of minimal flooding; not subdivided.

Flood elevation differences, FHF's, flood insurance zones, and base flood elevations for the flooding source studied in detail in the community are shown in Table 3, Flood Insurance Zone Data.

5.4 Flood Insurance Rate Map Description

The Flood Insurance Rate Map for the City of Mansfield is, for insurance purposes, the principal product of the Flood Insurance Study. This map contains the official delineation of flood insurance zones and base flood elevation lines. Base flood elevation lines for riverine flooding sources show the locations of the expected whole-foot water-surface elevations of the base (100-year) flood. The base flood elevations and zone numbers are used by insurance agents, in conjunction with structure elevations and characteristics, to assign actuarial insurance rates to structures and contents insured under the National Flood Insurance Program.

Site is located on a 10-50 year flood plan.

file Copy

OHIO EPA GC/GC-MS WATER SAMPLE ANALYSIS

Date Received 87-11-18

Surface Water ☒; Groundwater ☐; Approved ☐ Laboratory Number 01072

District: SWDO ☐; SEDO ☐; NEDO ☐; NWDO ☒; CDO ☐

Sample volume received: 2 vials Yes ☒; No ☐; Quarts (Number) 2

Sample Type: Screening ☒; Compliance ☐; Complaint ☐; Survey ☐;
Litigation ☐ WELL USE: Public ☐; Industrial ☐;
Monitor ☐; Private ☐; Irrigation ☐; Private Residential ☐

Sample Collector's Name J. Schwartz / J. M. Gerber
Y Y M M D D H H M M

Sample Date/Sample Time :Begin 8 7 1 1 1 6 1 1 2 7

Sample Date/Sample Time :End 8 7 1 1 1 7 1 1 1 2

Facility Name White Consolidated Ind

Facility NPDES # 010004000 Ohio Permit # 21000037DC

Well Owner C/A Well Depth/Aquifer

Well Owner Address

Well County/Township

Sample Location Description EFFLUENT ^{JMG}

Receiving Stream (RM) Rocky Fork of the Mohican River

Latitude/Longitude

Outfall Number 2100003001 Well Number

(Date / Extracted Analyzed) File Number Analyst

☒ Volatiles (87-11-24) AY24-3 Bailey

☒ Acid Extractables (11-23-87 12-11-87) 1211x1072 Waltham

☒ Base Neutral Extractables (" ") " "

Pesticides (" ") " "

PCBs (" ") " "

☒ Broad Scan (" ") " "

Parameter(s)

()

Sample: Grab ☒; Discontinuous ☐; Continuous ☒; Proportional ☐;
Composite Composite Composite

Composite Sample Information: Volume/Frequency/Duration

275 mL / every 15 mins / 24 hours

Comments on back: Yes ☒; No ☒ ^{JMG} Bioassay Sample Submitted: Yes ☒; No ☐

GRAB SAMPLES WERE TAKEN @ 1150 hours

a second sampler was set-up.

Volume/Frequency/Duration 175 ml / every 15 min / 24 hours
only 83 samples taken.

Time interval 1150 to 810

VOLATILE ORGANICS SAMPLE RESULTS
METHODS 601 & 602

SAMPLE 01072 WHITE CONSOLIDATED IND. - EFFLUENT
DATE COLLECTED 87-11-17 COLLECTOR SCHWARTZ / GERBER
DATE ANALYZED 87-11-24 ANALYST C. BAILEY
DATE PROCESSED 88-01-05 APPROVED BY IR

NO.	CAS NO.	COMPOUND	MDL	F*	C*	CONC (ug/L)
1	75-35-4	1,1-Dichloroethene	0.5	5	yes	<MDL
2	75-09-2	Methylene chloride	1.8			
3	156-60-5	trans-1,2-Dichloroethene	0.5			
4	75-34-3	1,1-Dichloroethane	0.5			
5	67-66-3	Chloroform	0.5			
6	71-55-6	1,1,1-Trichloroethane	0.5			
7	56-23-5	Carbon tetrachloride	0.5			
8	107-06-2	1,2-Dichloroethane	0.5			
9	79-01-6	Trichloroethene	0.5			
10	78-87-5	1,2-Dichloropropane	0.5			
11	75-27-4	Bromodichloromethane	0.5			
12	100-75-8	2-Chloroethylvinyl ether	0.5			
13	10061-02-6	trans-1,3-Dichloropropene	0.5			
14	10061-01-5	cis-1,3-Dichloropropene	0.5			
15	79-00-5	1,1,2-Trichloroethane	0.5			
16	127-18-4	Tetrachloroethene	0.5			
17	124-48-1	Dibromochloromethane	0.5			
18	106-93-4	1,2-Dibromoethane	0.5			
19	75-25-2	Bromoform	0.5			
20	79-34-5	1,1,2,2-Tetrachloroethane	0.5			
21	71-43-2	Benzene	0.5			
22	108-88-3	Toluene	0.5			
23	108-90-7	Chlorobenzene	0.5			
24	100-41-4	Ethylbenzene	0.5			✓
25	108-38-3	1,3-Dimethylbenzene**	0.5			} 5.3 (**)
26	106-42-3	1,4-Dimethylbenzene**	0.5			
27	100-42-5	Ethynyl benzene	0.5			<MDL
28	95-47-6	1,2-Dimethylbenzene	0.5			2.8
29	541-73-1	1,3-Dichlorobenzene	0.5			<MDL
30	106-46-7	1,4-Dichlorobenzene	0.5			↓
31	95-50-1	1,2-Dichlorobenzene	0.5	✓	✓	✓

*F=Dilution

*C=Confirmed by GC/MS

** 1,3-Dimethylbenzene and 1,4-Dimethylbenzene coelute and cannot be separately quantitated at this time.

COMMENTS:

A dilution of x5 was the lowest dilution possible due to foaming.

OHIO EPA * GC/MS ANALYSIS REPORT * BASE-NEUTRAL AND ACID EXTRACTABLES

SAMPLE: 01072LABORATORY NUMBER: 1211X1072DATE COLLECTED: 11-17-87DATE ANALYZED/ANALYST: 12-11-87 WalthamAPPROVED BY/DATE: R11-4-88DATE EXTRACTED/BY: 11-23-87 HollandDILUTION (F): 5.0

LBR#	CAS#	COMPOUND	CONC. (UG/L)	MDL	COMMENTS
2	111-44-4	BIS(2-CHLOROETHYL) ETHER	ALL < MDL * F	3.4	
3	541-73-1	1,3-DICHLOROBENZENE		2.2	
4	106-46-7	1,4-DICHLOROBENZENE		2.0	
5	95-50-1	1,2-DICHLOROBENZENE		2.0	
6	108-60-1	BIS(2-CHLOROISOPROPYL) ETHER		2.7	
7	67-72-1	HEXACHLOROETHANE		2.1	
8	621-64-7	N-NITROSODI-N-PROPYLAMINE		3.6	
10	98-95-3	NITROBENZENE		2.9	
11	78-59-1	ISOPHORONE		3.6	
13	111-91-1	BIS(2-CHLOROETHOXY) METHANE		3.4	
14	120-82-1	1,2,4-TRICHLOROBENZENE		2.3	
16	91-20-3	NAPHTHALENE		2.3	
17	87-68-3	HEXACHLOROBUTADIENE		2.3	
18	77-47-4	HEXACHLOROPENTADIENE		2.1	
19	91-58-7	2-CHLORONAPHTHALENE		2.3	
20	208-96-8	ACENAPHTHYLENE		1.9	
21	131-11-3	DIMETHYL PHTHALATE		4.6	
22	606-20-2	2,4-DINITROTOLUENE		2.6	
23	83-32-9	ACENAPHTHENE		1.8	
24	121-14-2	2,4-DINITROTOLUENE		2.2	
25	86-73-7	FLUORENE		1.7	
26	84-66-2	DIETHYL PHTHALATE		4.0	
27	7000-72-3	4-CHLOROPHENYL PHENYL ETHER		2.1	
28	86-30-6	N-NITROSODIPHENYL AMINE		3.4	
29	101-55-3	4-BROMOPHENYL PHENYL ETHER		1.8	
30	118-74-1	HEXACHLOROBENZENE		4.0	
31	85-01-8	PHENANTHRENE		2.0	
32	120-12-7	ANTHRACENE		1.6	
33	84-74-2	DI-N-BUTYL PHTHALATE		2.6	
34	206-44-2	FLUORANTHENE		2.3	
35	129-00-0	PYRENE		2.5	
36	85-68-7	BENZYL BUTYL PHTHALATE		1.9	
37	56-55-3	BENZO(A)ANTHRACENE		2.3	
38	218-01-9	CHRYSENE		2.5	
39	117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE		1.9	
40	117-84-0	DI-N-OCTYL PHTHALATE		2.0	
41	207-08-9	BENZO(K)FLUORANTHENE		2.5	
42	205-99-2	BENZO(B)FLUORANTHENE		2.9	
43	50-32-8	BENZO(A)PYRENE		2.4	
44	193-39-5	INDENO(1,2,3-CD)PYRENE		2.7	
45	53-70-3	DIBENZO(A,H)ANTHRACENE		3.0	
46	191-24-2	BENZO(G,H,I)PERYLENE		2.9	
48	108-95-2	PHENOL		1.3	
49	95-57-8	2-CHLOROPHENOL		2.7	
51	85-75-5	2-NITROPHENOL		2.8	
52	105-67-9	2,4-DIMETHYLPHENOL		2.4	
53	120-83-2	2,4-DICHLOROPHENOL		3.0	
54	59-50-7	4-CHLORO-3-METHYLPHENOL		13.1	
55	88-07-2	2,4,6-TRICHLOROPHENOL		8.4	
56	51-28-5	2,4-DINITROPHENOL		6.3	
57	100-02-7	4-NITROPHENOL		4.8	
58	534-52-1	2-METHYL-4,6-DINITROPHENOL		11.7	
59	87-86-5	PENTACHLOROPHENOL		11.0	

OHIO EPA * GC/MS ANALYSES REPORT * BASE-NEUTRAL AND ACID EXTRACTABLES

INFORMATION FOR NON PRIORITY POLLUTANTS FOUND IN THE SAMPLE: 1211X1072
 MATCH BETWEEN MASS SPECTRA OF UNKNOWN AND OF NBS LIBRARY IS AT LEAST
 50% BY PURITY AND 85% BY FIT:

Code/Entry:

Ret Time	B Pk	Area	MW	Formula
CAS-Number (UP#1,UP#2)		Mass/Intensity Pairs		

NB 5175: CYCLOOCTANE, ETHENYL-

41	138	C10.H18
61142-41-4	(27, 373)(39, 494)(41,1000)	



DIVISION OF WASTEWATER POLLUTION CONTROL

Report - Chemistry Laboratory

Date Received 12-11-17Date Reported 8-7-12-15Station Unitz Consolidated EffluentSample Type Monthly ☐ Compliance ☒ Litigation ☐WQPA Survey ☐ Complaint ☐ BWQ Survey ☐Sample Collected By J. Schwartz J. M. G. S. 1630Report Analysis To CO ☐ NEDO ☐ NWDO ☒ SEDO ☐ SWDO ☐ CDO ☐ WQPA ☐Laboratory Number 06978Approved By: TR SC, ☐ ☐ ☐ ☐ ☐ ☐Sample Type: Grab ☐ Composite ☒Date & Time of Sample Begin 8/7/11/15 H 1 H 1 M 5 M 0End 8/7/11/17 H 0 H 8 M 1 M 0Frequency & Duration of Composite Sample 4x11/83+

PARAMETERS	STORE CODE	RESULTS	DATE ANALYZED	ANALYST	METHOD CODE
FIELD MEASUREMENTS					
<input type="checkbox"/> Chlorine, Free Avl., mg/l	P50064,				
<input type="checkbox"/> Chlorine, Total Resd., mg/l	P50060,				
<input type="checkbox"/> Conductivity, umhos/cm	P94,				
<input type="checkbox"/> Dissolved Oxygen, mg/l	P299,				
<input type="checkbox"/> Flow, CFS	P61,				
<input checked="" type="checkbox"/> pH, SU <u>Grab</u>	P400,	<u>5.12</u>	<u>11-17</u>	<u>BR</u>	
<input checked="" type="checkbox"/> Temperature, Water, °C	P10,	<u>28.7</u>	<u>11-17</u>	<u>BR</u>	
<input type="checkbox"/> Gage Height, ft.	P65,				
METALS					
<input checked="" type="checkbox"/> Aluminum, Total Al, ug/l	P1105,	<u><200</u>	<u>11-14</u>	<u>BR</u>	
<input type="checkbox"/> Arsenic, Total As, ug/l	P1002,				
<input type="checkbox"/> Barium, Total Ba, ug/l	P1007,				
<input checked="" type="checkbox"/> Cadmium, Total Cd, ug/l	P1027,	<u>20.2</u>	<u>11-30</u>	<u>PS</u>	
<input type="checkbox"/> Calcium, Total Ca, mg/l	P916,				
<input type="checkbox"/> Chromium, Hex Cr, ug/l	P1032,				
<input checked="" type="checkbox"/> Chromium, Total Cr, ug/l	P1034,	<u><40</u>	<u>11-24</u>	<u>BR</u>	
<input checked="" type="checkbox"/> Copper, Total Cu, ug/l	P1042,	<u><10</u>	<u>11-24</u>	<u>BR</u>	
<input type="checkbox"/> Iron, Diss, Fe, ug/l	P1046,				
<input checked="" type="checkbox"/> Iron, Total Fe, ug/l	P1045,	<u>2400</u>	<u>11-24</u>	<u>BR</u>	
<input checked="" type="checkbox"/> Lead, Total Pb, ug/l	P1051,	<u>3</u>	<u>12-3</u>	<u>PS</u>	
<input type="checkbox"/> Magnesium, Total Mg, mg/l	P927,				
<input type="checkbox"/> Manganese, Total Mn, ug/l	P1055,				
<input type="checkbox"/> Mercury, Total Hg, ug/l	P71900,				
<input checked="" type="checkbox"/> Nickel, Total Ni, ug/l	P1067,	<u>2400</u>	<u>11-24</u>	<u>BR</u>	
<input type="checkbox"/> Potassium, Total K, mg/l	P937,				
<input type="checkbox"/> Selenium, Total Se, ug/l	P1147,				
<input checked="" type="checkbox"/> Silver, Total Ag, ug/l	P1077,	<u>N/A</u>			
<input type="checkbox"/> Sodium, Total Na, mg/l	P929,				
<input type="checkbox"/> Strontium, Total Sr, ug/l	P 1082,				
<input checked="" type="checkbox"/> Zinc, Total Zn, ug/l	P1092,	<u>110</u>	<u>11-24</u>	<u>BR</u>	
NON-METALS					
<input type="checkbox"/> Acidity, Total CaCO ₃ mg/l	P70508,				
<input type="checkbox"/> Alkalinity, Total CaCO ₃ mg/l	P410,				
<input type="checkbox"/> BOD, 5-day, mg/l	P310,				
<input type="checkbox"/> cBOD, 5 Day, mg/l	P80082,				
<input type="checkbox"/> BOD, 20 Day, mg/l	P324,				
<input type="checkbox"/> cBOD, 20 Day, mg/l	P80087,				
<input type="checkbox"/> MBAS, mg/l	P38260,				
<input type="checkbox"/> Carbon, Total Org., mg/l	P680,				
<input type="checkbox"/> COD, mg/l	P335,				
<input type="checkbox"/> Chloride, Cl, mg/l	P940,				
<input type="checkbox"/> Conductivity at 25°C, umhos/cm	P95,				
<input type="checkbox"/> Cyanide, Total, mg/l	P720,				
<input type="checkbox"/> Fluoride, F, mg/l	P951,				
<input type="checkbox"/> Hardness, Total as CaCO ₃ mg/l	P900,				
<input type="checkbox"/> Nitrate-Nitrite, as N, mg/l	P620,				
<input type="checkbox"/> Nitrite, as N, mg/l	P615,				
<input type="checkbox"/> Nitrogen, Ammonia as N, mg/l	P610,				
<input type="checkbox"/> Nitrogen, Total Kjeldahl, mg/l	P625,				
<input checked="" type="checkbox"/> Oil and Grease, mg/l <u>Grab</u>	P556,	<u>21.8</u>	<u>11/25</u>	<u>BR</u>	
<input type="checkbox"/> pH, SU	P403,				
<input type="checkbox"/> Phenolics, ug/l	P32730,				
<input type="checkbox"/> Phosphorus, Diss. P, mg/l	P666,				
<input type="checkbox"/> Phosphorus, Total P, mg/l	P665,				
<input type="checkbox"/> Residue, Total, mg/l	P550,				
<input type="checkbox"/> Residue, Total Flt, mg/l	P70300,				
<input checked="" type="checkbox"/> Residue, Total Nflt, mg/l	P530,	<u>87</u>	<u>11/20</u>	<u>BR</u>	
<input type="checkbox"/> Silica, Dissolved, mg/l	P955,				
<input type="checkbox"/> Sulfate, SO ₄ , mg/l	P945,				
MICROBIOLOGY					
<input type="checkbox"/> Fecal Coliform, MF, #/100 ml	P31616,				
<input type="checkbox"/> Fecal Strep, MF # / 100 ml	P31679,				
PRESERVATIVES					
<input type="checkbox"/> NaOH	<input type="checkbox"/> K ₂ Cr ₂ O ₇	<input checked="" type="checkbox"/> N/P	DISTRIBUTION: WHITE-LAB		
<input type="checkbox"/> H ₂ SO ₄	<input type="checkbox"/> CuSO ₄ ·H ₂ PO ₄		GREEN-PERMIT		
<input checked="" type="checkbox"/> HNO ₃	<input checked="" type="checkbox"/> Other		CANARY-STREET		
			PINK-DISTRICT		
			GOLDENROD-DISTRICT		

Comments: Bioassay Sample submitted.